2003

Patients Presenting for Psychiatric Emergency Services : Clinical Characteristics, Psychosocial Stressors and Disposition

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PATIENTS PRESENTING FOR PSYCHIATRIC EMERGENCY SERVICES: CLINICAL CHARACTERISTICS, PSYCHOSOCIAL STRESSORS AND DISPOSITION

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Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Psychology

August 2003

PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE

DEPARTMENT OF PSYCHOLOGY

Dissertation Approval

This is to certify that the dissertation presented to us by Kristen Maura Cirelli on the 12th day of March, 2003, in partial fulfillment of the requirements for the degree of Doctor of Psychology, has been examined and is accepted in both scholarship and literary quality.

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Dedication

This dissertation is dedicated my mother and best friend, Kathleen Donaldson Cirelli. She has guided me with her wisdom and strength throughout my life. My mother has empowered me with the knowledge that I can accomplish anything I set out to do and she has encouraged me every step of the way through this process. In her own work, she has set an excellent example of how determination and a positive attitude can lead to success. She has instilled in me a love of family, an appreciation of friends and of all of the wonderful things that life has to offer even when there are obstacles to overcome. I consider myself so lucky to have been influenced by such an incredible woman. Without her love and support I would not be where I am today. It has been an amazing journey and for this I am forever grateful.

Acknowledgments

First and foremost I would like to express my gratitude to my family. Moms, Susan, Kath and Janine, I couldn't have done this without you. Thank you for your love and support along the way. To my dearest friends, who are also my family, your love and encouragement are priceless. If it were not for your loving support, I truly could not have completed this endeavor.

To my committee members, it is quite difficult to convey my gratitude in words. The precious time and the endless energy you put into this project will be forever remembered.

I extend sincere appreciation to Dr. Golden, my dissertation chair. She has perfected the art of encouragement: providing guidance always, a push when necessary, and cheering me toward the finish line with her unwavering positive attitude. Dr. Golden added to this a touch of warmth and humor, which was of immeasurable value in this process. I consider myself lucky to be able to call her a mentor.

I would also like to express thanks to Dr. DiTomasso, whose time, energy and commitment greatly facilitated this project and is truly appreciated. Amidst even the busiest of times, he was always willing to provide supervision or assistance. His expertise and guidance throughout my graduate studies at PCOM have provided me with an invaluable learning experience.

I am very grateful to Dr. Udell, whose generosity and creativity was pivotal in completing this project. I extend great thanks to her for trusting that my goal was to explore the PES in order to add something of value to the literature and hopefully to contribute to practical implementation. I have gained valuable experience in the process.

I admire Dr. Udell's dedication to training research. It is through the kindness of wonderful people such as she that others can grow. I would additionally like to thank all of the individuals on site who were accommodating during the data collection process.

I would very much like to extend my gratitude to April. She is truly my soul friend and fellow hoop dancer. To say "thank you" does not begin to express the appreciation I have for all that we have been through during this process. I can't imagine doing this without her by my side. How lucky I am to have someone with whom the synergy of this process almost took on a life of its own. How lucky to have been able to temper hard work with play. We have created so many wonderful memories on this incredible journey and I very much look forward to future endeavors.

Finally, I would like to extend sincere appreciation to the faculty and members of my class at PCOM for the years of education, nurturance and support. Through effort and joy, endless papers and presentations, mentors were admired and friendships were made. I will forever cherish my time at PCOM.

Abstract

The aim of this study was to describe the characteristics of 600 individuals who presented to two Psychiatric Emergency Services (PES) located in one county of southern New Jersey. A retrospective chart analysis investigated demographic, clinical, and psychosocial variables that describe the PES presenter. It also examined how these variables differ between the urban and suburban sites, and how they affected the disposition decision. Because there is a paucity of information investigating the role that psychosocial stressors play, there was specific focus on psychosocial stressors as defined by Axis IV of the multiaxial system outlined in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revision, (2000 [DSM-IV-TR].) Results of this correlational study found that those patients who presented with "threat of harm to self or others" had a greater chance of being admitted. Presence of social support did not affect disposition decision, though if a patient was connected with case management, there was a greater chance they were hospitalized. Patients with substance abuse had more psychosocial stressors. There were some significant differences between the urban and suburban PES sites in reference to the psychosocial stressors with which the patients presented. The urban presenters experienced more homelessness, unemployment, and had fewer social supports, and the suburban presenters experienced more occupational stress. These findings describe the differences between urban and suburban sites, the affect that psychosocial stressors may have on a patient, and how these variables may impact the disposition decision.

Chapter 1

Introduction and Literature Review

There has been a rapid increase in the volume and complexity of patients presenting to the Psychiatric Emergency Service (PES) in the past few decades (Allen, 1999). The impetus for this upsurge occurred with the Community Mental Health Centers Act of 1963, which deemed that psychiatric treatment be provided in all federally funded community mental health centers [CMHC] (Gerson & Bassuk, 1980). At this time there was a shift in mental health care provisions from inpatient state hospitals to a less restrictive community-based level of care. These include the community mental health centers, residential facilities, and day hospital wards. This movement is commonly known as deinstitutionalization. Later efforts in cost containment, namely managed care, have further decreased the number of patients who are able to receive long-term inpatient care and put more severely mentally ill patients into the community. In 1955, 1.7 million psychiatric episodes occurred in the U.S., 77% of which were treated on an inpatient basis. By contrast, in 1994, there were 10 million psychiatric episodes and 26% were treated on an inpatient basis (Allen, 1999). In addition to the financial and legal trends, there are detrimental societal ills that greatly add to this problem. These include homelessness, AIDS and the availability of low-cost drugs such as "crack" cocaine. Because of the increasing use of the PES as the gateway to other psychiatric and psychological services, and the potentially important impact it may have on a patient's mental health, this has emerged as a highly valued service and warrants ongoing research in order to make necessary improvements.

The PES assesses a diverse collection of human crises. Clinical decision making in the PES is based on consideration of the characteristics of the individual and the dimensions of the crisis that precipitated the patient's arrival at the PES. Baxter, Chodorkoff, and Underhill (1968)

generally defined the psychiatric emergency as a disruption in the individual's mental functioning that prevents the patient from adapting. "During a crisis, the patient experiences an emergence of impulses, affect, or cognitions that threaten to overwhelm [him or her]" (Baxter, et al., p. 1547). The PES intervention is required to avoid harm to the patient or others or to avoid deterioration. A comprehensive assessment of clinical, demographic and psychosocial characteristics is gathered to assist in this decision-making process, and a determination is made as to whether the patient will be admitted into the hospital or discharged back into the community. The resulting decision is referred to as "disposition." There are many studies examining the critical variables, which lead to the patient presenting to the PES (Bassuk, Winter, & Apsler, 1983; Gerson & Bassuk, 1980; Hendryx & Rohland, 1997; Lyons, et al., 1997; Marson, McGovern, & Pomp, 1988; Schnyder, Klaghofer, Leuthold, & Buddeberg, 1999; Stefanis, Rabe-Hesketh, Clark, & Bebbington, 1999; Yohanna, 1998). Factors that are often thought to be significantly related to the decision to admit are: danger to self, danger to others, and severity of symptoms (Lyons, et al., 1997; Marson, et al., 1988). The focus may also be on diagnoses (Greenberg, Rosenfeld, & Ortega, 1995; Lieberman & Baker, 1985; Marson, et al., 1988; Zealberg & Brady, 1999) or demographics (Bassuk, et al., 1983; Hatfield, Perry, & Spurrell, 2000; Way, Evans, & Banks, 1992). However, few studies focus specifically on the role that the psychosocial stressors play in the presentation of the patient (Dhossche & Ghani, 1998; McNiel, Hatcher, Zeiner, Wolfe, & Myers, 1991) or in the disposition decision (Allen, 1999; Lidz, Coontz, & Mulvey, 2000; Rabinowitz, Massad, & Fennig, 1995; Spooren & Jannes, 1997). The PES is overwrought with emergencies that are primarily psychosocial in origin, as well as those that are driven by episodes of psychiatric problems (Hatfield, et al., 2000).

The term "behavioral emergency" as defined by Kleespies (2000, p. 1104), means that "a

patient has reached an acute mental state in which he/she is in imminent risk of behaving in a way that will result in serious harm or death to self or others unless there is some immediate intervention." Examples of this involve patients in serious suicidal or violent states, or when a patient is unknowingly putting himself or herself at harm by not engaging in safe behaviors or self-care. Kleespies defines "behavioral crisis" as a state of mind that the patient has reached "in which his/her usual coping mechanisms are inadequate to restore equilibrium or to allow him/her to go on functioning in an adaptive way" (p. 1104). Both of these situations will bring a patient to the PES, however, the behavioral crisis does not necessarily mean that the patient or others are in imminent danger. Differentiating these terms and where the patient falls within them can guide the PES clinician's decision-making process and the chosen intervention.

Patient variables that have been most often related to admission to psychiatric inpatient hospitalization include severity of schizophrenic symptoms or psychosis (Oster, Bernbaum, & Patten, 2001; Schnyder, et al., 1999; Stiebel, Allen, & Gordon, 2000; Way, et al., 1992), suicidal or homicidal ideation (Allen, 1999; Hendryx & Rohland, 1997), social supports (Bassuk, et al., 1983; Gerson & Bassuk, 1980), history of hospitalization (Schnyder, et al., 1999; Way, et al., 1992), referral source (Oster, et al., 2001; Sales, 1991; Schnyder, et al., 1999), and clinician experience (Way, et al., 1992). Rabinowitz, et al. (1995) found that level of psychopathology and dangerousness were the primary factors influencing the clinician's disposition decision. According to Yohanna (1998), the symptoms that most require treatment in a PES are suicide potential, aggressive outbursts, verbal threats, verbal and physical agitation, psychotic ideation, impaired judgment, confusion, instability, and absence of family/support.

The PES serves as an entry point into the mental health system, so it plays an important role in that the disposition determination will be responsible for linking patients with community

mental health agencies (Way, et al., 1992). The decisions made in the PES have great impact on the patient, the family and the overall community (Gerson & Bassuk, 1980). The goals of doing the PES assessment are (a) to establish a provisional diagnosis, (b) to identify social and environmental factors contributing to the present crisis, (c) to assess willingness to cooperate / risk of harm, and (d) to develop a plan for immediate treatment and disposition (American Psychiatric Association, 1995). The American Psychiatric Association (1995) outlines standards for a psychiatric evaluation, which specifies that in a PES, the clinician must provide a diagnosis, and assess social, environmental, and cultural factors.

In a study comparing the characteristics of the PES in England and the United States, Bassuk, et al. (1983), stated "it was not the degree of psychopathology, but the lack of an available support network, an inability to engage the patient in the system, and a history of serious chronic maladjustment that led to the majority of ‚emergency visits' (p. 180)". "Available support network" was determined by the amount of contact with relatives or friends; "inability to engage in the system" was determined by whether the client continued with suggested treatment; and "serious chronic maladjustment" was determined by history of crisis visits and Global Assessment of Functioning (GAF) scores.

"The essential task in the (psychiatric) emergency room is to delineate those factors that can be readily translated into a dispositional choice" (Gerson & Bassuk, 1980, p. 9). Disposition in this context refers to the range of possible outcomes available to a presenting patient, such as inpatient hospitalization, referral to outpatient therapy, residential treatment and so forth (Marson, et al., 1988). Some of the most powerful predictors of disposition are: referral by the police or by another health care provider, psychotic disorder, danger of the patient to self or others, strength of social support system, and previous history of hospitalization (Schnyder, et

al., 1999).

The utilization of psychiatric emergency services is highest among underprivileged individuals. The results of a study conducted by Dhossche and Ghani (1998) showed support for this statement by providing evidence that unemployment and homelessness were stronger correlates of multiple PES visits than a diagnosis of schizophrenia. A comprehensive assessment in the PES should include the patient's condition under which he arrived in crisis, including a mental status exam as well as an assessment of his psychosocial variables. It is important to note, however, that an individual has psychosocial stressors, does not mean those stressors are the reason he or she is presenting. For instance, if an individual presents who is unemployed, that variable may be the norm for the person and may not be causing him or her distress.

For many patients, the PES may serve as the only mental health treatment source (Strakowski, et al., 1995), sometimes causing these emergency service centers to be utilized as more of a general support system for these patients than for its intended goal, which is to treat a true psychiatric crisis. Increasingly, the patients who present to these sites are there as a result of multiple psychosocial stressors either as the primary reason for their visit, or in addition to other factors, such as diagnosis or suicidal or homicidal ideation. One reason for the variability of outcome in these studies could be the regional variability in mental health systems and commitment status (McNiel, et al., 1991) or the variability of the populations that present at the sites where the studies have been conducted.

There are some variables that have been reviewed in the literature that have greater significance in determining disposition. These include: police referral, previous psychiatric history, and psychosis. In a study that followed 122 patients post PES presentation, Bengelsdorf, Levy, Emerson, and Barile (1984) emphasize three variables: a) patient dangerousness,

b) support system and motivation, and c) ability to cooperate. The authors feel these factors encompass the essential variables to make a disposition determination. It is of great importance to be able to weigh the significance of the variables used by individuals serving diverse populations as they make decisions in the PES. Repeat presenters are more likely to have diagnosis of psychosis, substance abuse and personality disorders while also being characterized as having poor social supports (Stefanis, et al., 1999).

Early studies in the area, such as Gerson and Bassuk (1980), successfully identified variables that were significantly correlated to the decision to hospitalize. They generally concluded that mental health providers in the PES are doing their job well, but must continue to meet the challenge of providing efficient and quality psychiatric emergency services.

Initial sections of this paper discuss the characteristics describing the typical patient presenting to the PES, a description of psychosocial stressors, and disposition decisions leading to admission or discharge. The review concludes with a summary and critique of existing literature, followed by a discussion of the specific research questions and hypotheses suggested by the review and examined in this dissertation.

The Typical PES Presenter

The majority of research describing the typical PES presenter does so in terms of disposition (Marson, et al., 1988, Gerson & Bassuk, 1980). Gerson and Bassuk's critical review of literature found that chances increased for inpatient referrals if the patient was male, older, had a high degree of psychopathology and exhibited dangerousness. Marson and colleagues found that

symptom crisis and dangerousness have emerged as a more important determinant than diagnosis, and that active suicidal and/or homicidal ideation was a key predictor variable. This study also found that there was an increased potential for inpatient hospitalization if the patient was single or if the patient was unemployed, and that the presence of social resources decreased chances of admission.

Breslow, Erickson, and Cavannaugh, (2000) examined trends that occurred at a PES between 1990 and 1995, reviewing more than 24,000 evaluations. The findings indicate that during this time period there was an upsurge in children and adolescent visits (8.0% to 11.5%). Average patient contact time increased from 4.8 hours to 6.5 hours, a 35% increase. Affective disorders rose from 20.5% to 23.7%. Patients with a primary and secondary diagnosis of substance abuse account for a much higher proportion of patients in 1995 than in 1990. There are also more patients who meet criteria for a secondary diagnosis. There are more police referrals, and more need for emergency medication, while they found that family support has declined. The authors feel that these trends suggest increasing complexity of the PES presenter.

A study by Vermeiren and Van Oost (1999) identified those individuals at higher risk for a psychiatric emergency had four characteristic features: "1). Psychiatric history or family history of psychiatric disorder(s); 2.) Poor or absent social support system with inadequate or poor problem-solving skills; 3.) A manifest psychosocial crisis with an increasing level of stress; 4.) Emerging moderate psychiatric complaints" (p.117).

Demographics

There have been many studies that have examined the impact of multiple variables, which lead patients to psychiatric emergency services (Breslow, et al., 2000; Gerson & Bassuk, 1980; Marson, et al., 1988; Mattioni, et al., 1999; Rabinowitz, et al., 1995; Spooren & Jannes, 1997). Gerson and Bassuk provide a critical review of the literature until 1977. Marson and associates (1988) did a follow up study which reviewed more recent literature. They examined demographic variables including age, sex, marital status and socioeconomic status (SES). Each article focused on various factors, for instance, the Mattioni study found that hospitalization from the PES was associated with being male, unemployed and living with primary family.

Age. The cumulative findings in Gerson and Bassuk's (1980) overview indicate that there is a greater chance of hospitalization as age increases. One possible explanation they provide is the higher prevalence of certain disorders in different age groups. Mattioni, et al. (1999) found that 57.6% of patients fall between the ages of 30 to 49. The majority of the studies reviewed by the Marson, et al. (1988) overview found no significant relationship between age and disposition. One study done by Sobel, Anisman, and Hamdy (1998) indicates that the average age for a PES presenter is 34.5.

Gender. Schnyder, et al. (1999) found that the presenters at a PES were 50.2% females and 49.8% males. Another study conducted in a rural CMHC involving more than 13,000 patients indicate that there were 58% female and 42% male (Yates, Paxton, Griffiths, & Watson, 2000). Gender was another one of the variables evaluated by Gerson and Bassuk (1980). Five of the seven studies included in their overview reported no significant difference in the relationship between disposition for men and women. However, two of the studies reviewed by this article did show a correlation between gender and disposition in that more men are admitted than women.

Saarento, Rasanen, Nieminen, Hakko, and Isohanni (2000) found that men are heavier users of psychiatric services, but more women make contact. Males use psychiatric emergency services more than women, are more often admitted to the hospital and had more involuntary admissions than women. The authors suggest this could be due to different gender attitudes toward mental illness or more common social disadvantages for men in that region. Gender differences also varied with diagnosis in this study. Males had a higher rate of drug dependency, and females had a higher incidence of affective disorders. Huffine and Craig (1974) found these same results more than 25 years ago indicating that emotional distress is manifested differently between the sexes. Gross, Herbert, Knatterud, and Donner (1969) found outpatient department referrals were higher for females and inpatient admissions were higher for men. The more recent overview by Saarento and colleagues agree with this finding that being male was a statistically significant predictor of admission. Overall, there were no significant differences in the total duration of hospital care, nor were there any differences found in the total consumption of psychiatric care.

Marital Status. Schnyder, et al. (1999) indicated that 54.8% of patients in their study were single, 28% were married, and 17.2% were divorced, separated, or widowed. Hatfield, et al. (2000) reported that 67.7% were single and that men were more likely to be single (52.8% of men and 29.6% of women). Gerson and Bassuk (1980) state that if a patient has lost a partner through separation, death or divorce, chances of hospitalization are significantly greater. These studies indicated unmarried status correlate positively with PES presentation and hospitalization. Related to marital status is the patient's living situation. A study conducted by Mattioni, et al., (1999) found if a patient lives with his primary family or alone, he has a greater chance of being hospitalized than if he lives with his "own" family ("own" refers to spouse and children). The authors hypothesize that an individual who is able to form his or her own family demonstrates independence and better overall functioning.

Race. If emergency service evaluations, diagnosis, and disposition are affected by the patient's race, this would have a critical impact on the patient outcome in the mental health system (Strakowski, et al., 1995). The effects of race on disposition was found to be a nonsignificant factor in the early overview by Gerson and Bassuk (1980), as well as in the more current overview by Marson, et al. (1988). According to Gerson and Bassuk, race was a significant variable when alternative dispositions are considered in that there were more Caucasian patients referred for outpatient treatment than Non-Caucasian and that Caucasian patients were more often referred to private hospitals, and Non-Caucasian patients were referred to state hospitals. Huffine and Craig (1974) found that psychiatric admissions were higher for Non-Caucasians than for Caucasians.

The results of another, more recent study also indicate that African American patients are more likely to be hospitalized than Caucasian patients (Strakowski, et al., 1995). This study also concluded that African American patients were given the diagnoses of schizophrenia and substance abuse more often than similar Caucasian patients. Gross, et al. (1969) found that behavior requiring inpatient admission among females is more often perceived as neurotic when the patient is Caucasian, and schizophrenic when the patient is Non-Caucasian. This would have further effect on disposition. This finding was further supported by a study that compared the incidence, nature and long-term outcome of psychosis in different ethnic groups (Goater, et al., 1999). The results indicate higher incidence of schizophrenia and nonaffective psychosis for African American and Asian patients. Gross, et al. theorize "as the sociocultural distance between the clinician and the patient increases, diagnosis becomes less accurate, and dispositions more non-specific" (p. 638). The findings of the Strakowski, et al. study suggest that racial disparity exists in patterns of clinical psychiatric diagnoses as well as in how mental health services are provided in a PES.

Clinical Presentation and Diagnosis

The typical crisis patient presents with multiple diagnoses. One study found that 10% of the patients had three or more Axis I diagnoses (Zealberg & Brady, 1999). According to Schnyder, et al. (1999), the Axis I diagnoses that are the strongest predictors of immediate therapeutic intervention are psychotic disorder, mood disorder and adjustment disorder. In a study done by Oster, et al. (2001), which reviewed more than 10,000 crisis presentations, they

found the most prevalent diagnoses were: "Substance-induced psychotic disorder (23%), depressive disorder (23%), adjustment disorder (20%), schizophrenia, or psychosis not otherwise specified (19%), bipolar disorder (5%), anxiety disorder (2%), and other (8%) (p. 32)."

Diagnostic categories as variables used to determine disposition are weak in that there is considerable variability in the severity of problems within the diagnostic categories which are discrete rather than continuous (Lidz, et al., 2000). Gerson and Bassuk (1980) note that PES visits are characterized by the patient's acute symptoms that are distributed across a diagnostic continuum. Diagnosis is only one factor in the triage process. Other factors, such as level of support, self-care, dangerousness and severity of the symptoms, may be more important than the diagnosis in determining disposition (Gerson & Bassuk, 1980; Morrison, Hull, & Shephard, 2000). It is also important to be aware of the possible variability in how clinicians perceive disorders. One study compared the diagnosis made for 50 patients who had presented at a PES versus what their diagnosis was at a subsequent hospitalization (Lieberman & Baker, 1985). The results did find sufficient reliability for broad diagnostic categories of depression, psychosis, and alcoholism; however more specific subtypes of disorders did not prove to be sufficiently reliable. These broad categories are often sufficient for triage and emergency treatment. In any assessment, after immediate safety concerns are addressed, it is extremely important to rule out any medical or substance-induced causes of presenting symptoms.

Psychotic disorder. Many studies have shown that one of the most important variables in determining an inpatient admission is psychotic presentation of the patient (Marson, et al., 1988; Oster, et al., 2001; Schnyder, et al., 1999; Stiebel, et al., 2000; Tischler, 1966; Way, et al., 1992). Emergency evaluation of a psychotic patient requires the clinician to first stabilize the condition,

review the available information, develop a working diagnosis, and initiate proper treatment associated with the presumed disorder. A study by Forster, Buckley, and Phelps (1999) summarizes the importance of conducting a careful evaluation of symptom presentation to determine an accurate and working diagnosis. Some of the disorders in need of differentiating are: schizophrenia, schizoaffective disorder, affective disorder, delirium, substance-induced or withdrawal-induced psychosis as well as post-traumatic stress disorder. Specific identifiers, as well as different treatments, are reviewed.

A study conducted by Stiebel, et al. (2000) indicates that the factor that drives most psychiatric emergencies is the state of arousal. This can be seen in the patient as psychomotor agitation, irritability, or impulsive aggression. Some patients experience suicidal ideation, and others engage in aggressive acts due to the aroused state, which is perhaps prompted by hallucinations or delusions. The principal focus of emergency management is the aroused state of the thought-disordered individual, which may lead to disturbed behavior. This study found that the mean amount of patients receiving involuntary medications to decrease agitation was 16%. The agitated patient who presents with psychosis presents unique challenges diagnostically and with treatment.

One of the most difficult diagnostic decisions without a complete history is mood disorder with psychotic features versus schizophrenia. This has resulted in an increase in the psychosis NOS diagnosis in the PES and has made treatment less specific (Forster, et al., 1999). Misdiagnosis may also result in inappropriate prescription treatment (i.e. antipsychotics vs. mood stabilizers). Relapse rate for major psychiatric illness is very high. Of repeat presenters (two or more times) in one PES, 60% were psychotic.

Mood disorder. Turrina, et al. (1999) report 35% of their sample suffered from an affective disorder; 20% with major depressive disorder and 13% with bipolar. In a Canadian study of 544 patients who reported to a PES, 23.6% suffered from affective disorders (Milner, Florence & Glick, 1999). Major depressive disorder is the most common psychiatric illness. Fifty percent of individuals with severe major depression experience recurrence, and of that percentage, 15% commit suicide. It is noteworthy that almost 98% of substance abusers also suffered from depression (Zealberg & Brady, 1999). Milner and associates recommend that all patients presenting to the PES should be screened for depression regardless of their chief complaint. The major issues in treating depressive disorders in the PES are: psychological management, pharmacologic treatment and disposition. A thorough risk assessment must be done for all individuals who present to the PES with depression. It is necessary to evaluate such patients for suicidal ideation, homicidal ideation and psychotic symptoms.

Manic patients who present at the PES may be managed in a similar manner to patients who present with other psychotic symptoms. They may require restraint or pharmacologic intervention to ensure safety for patients, staff, and the public. Mood may be elevated, dysphoric, or irritable. Because of their impulsive behavior and poor judgment, manic individuals may engage in risky behaviors that put them at further risk for harming themselves or others. Hospitalization may be warranted if the manic individual exhibits self-destructive acts or violence toward others. According to Milner, et al., (1999), 11% of manic individuals had engaged in violent behavior the previous year and the lifetime risk for suicide is 19% for this clinical population. Also important to consider in the disposition decision-making process is the individual's ability to care for basic needs or substantial physical risk caused by lack of sleep and nutrition, inability to cooperate with treatment and insufficient outpatient support.

Anxiety disorder. Milner and coresearchers (1999) found that 24.8% of patients who presented to the PES suffered from anxiety disorders. Anxiety disorder is either the primary psychiatric illness (such as in panic disorder and generalized anxiety disorder), or a response to a stressful event (as can be seen in adjustment disorder, specific phobia, or in post-traumatic stress disorder). In these anxious patients, the severity of perceived threat, and the beliefs attached to certain symptoms, increase chances that the emergency department [ED] becomes an alternative to primary care. Milner and colleagues suggest that because there tends to be intense somatic symptoms associated with anxiety, these patients are known to be particularly high utilizers of emergency services. In assessing the anxious patient, they recommend that the clinician should make sure immediate safety concerns are addressed and rule out the possibility of a medical problem or substance use. Twenty-five percent of patients seen in the medical emergency room for chest pain met criteria for panic disorder (Milner, et al.). It is extremely important to gather a thorough history and to assess the patient's baseline, intensity of the symptoms, as well as any previous medication and the response. Mezzich, Evanczuk, Mathias, and Coffman (1984) found that of those patients who present with anxiety disorder, 20.8% went inpatient and 79.2% were referred to outpatient care.

Adjustment disorder. In a study conducted by Greenberg, et al., (1995), 7.1% of adults presenting to the PES were diagnosed with adjustment disorder. This study compared patients admitted with an adjustment disorder diagnosis to a control group of other diagnoses. They found that 64% had depressed subtype and 25% of adults had mixed disturbance of emotions.

This study also found a higher rate of suicidality and substance abuse among the adjustment disorder group than the control group. This information is extremely important for clinicians because adjustment disorder is often viewed as one of the less serious diagnoses. One positive finding in this study is the lower recidivism rates for those patients who are diagnosed with adjustment disorder. In one study (Schnyder & Valach, 1997), adjustment disorder was the most frequent diagnosis in the suicide attempt group. This is important in that risk of deliberate self-harm that is found in the suicide attempters is one of the strongest predictors of admittance into a hospital.

Substance use. The issue of substance use is very complex to the mental health system. Substance abuse often exacerbates symptoms among patients with primary psychiatric disorders (Schiller, Shumway, & Batki, 2000). Those who are mentally ill have a higher prevalence of substance abuse, and those individuals whose primary diagnosis is substance abuse, are likely to develop psychopathology (Breslow, Klinger, & Erickson, 1996a). The impact of the substance abusing population is substantial in the PES; they require high levels of behavior management; they are usually acutely suicidal; yet they have less need for psychiatric hospitalization. Zealberg and Brady (1999) examined the results of an annual survey that went to general emergency departments, which indicated a greatly increased prevalence of drug-related episodes. From 1978 to 1994, there was a 60% increase in drug-related episodes, whereas overall ED visits only increased by 26%. During that same time period, cocaine-related episodes increased from 3,400 to 142,900.

Breslow, et al. (2000) report that patients with a primary diagnosis of substance abuse or

dependence rose from 17.5% in 1990 to 22.3% in 1995. The number of patients with abuse or dependence as secondary disorders rose from 41% to 49.3% in the same time frame. Other studies show that patients who present to the PES with substance misuse issues range from 15% to 50% (Breslow, et al., 1996a; Schiller, et al., 2000; Unnithan & Farrell, 1992; Zealberg & Brady, 1999). Alcohol is widely used by the majority of individuals in all diagnostic groups (Breslow, et al., 1996a). One study showed that 37.5% of patients presenting at a PES were diagnosed as alcohol dependent (Lejoyeux, et al., 2000). Psychiatric diagnoses that were most often associated in this study were dysthymia (44%) and anxiety (31%). They were more often men (64%) and more than half were unemployed. The study by Breslow and associates (1996a) indicates that 32% of PES patients presented with acute intoxication.

There is a need for reliable detection of a comorbid substance use among PES presenters in that it may have a large impact on the disposition decision and the overall course of treatment for the individual presenting at the PES. According to Gilfillin, et al. (1998), despite the high rates of active substance use among the patients seen in the PES, clinicians are unable to decipher the patients who are likely to be using illicit drugs at the time of presentation. Clinicians drug tested 38% of nonpsychotic patients, and tested 70% of psychotic patients. Results of the study indicate the prevalence of concurrent drug use among PES presenters was higher in nonpsychotic patients (34%) than in psychotic patients (21%). These results present a problem in that the likelihood of a clinician testing for drugs is higher when a patient presents as psychotic and supports the use of drug screening as a routine procedure. A study conducted by Schiller, et al. (2000), found 44% of patients who were screened on a mandatory basis at a PES in California had positive substance screens; 37% were positive for drugs; and 7% were positive for alcohol only. African American presenters were 2.5 times more likely to have positive drug

screens than Caucasian presenters, and the former were five times more likely to be positive for cocaine.

In considering disposition, patients with primary substance abuse disorder were less likely to be hospitalized than those with affective disorders or schizophrenia as a primary diagnosis (Schnyder, et al., 1999; Strakowski, et al., 1995). Many patients with substance-related disorders present to the PES with chronic problems, as opposed to acute, and therefore should technically not be treated on an emergency basis. Cocaine intoxication may produce psychotic agitation, which could result in the need for a PES evaluation; however, the symptoms may rapidly shift to dysphoria. If a patient with schizophrenia is using cocaine, it decreases the negative symptoms and may therefore be a method of self-medication for the schizophrenic patient (Serper, Alpert, Richardson, & Dickson, 1995). A study by Serper, Chou, Allen, Czobor, and Cancro (1999) examined PES presenters with cocaine abuse, schizophrenia, and both cocaine abuse and schizophrenia. This research lends support for the idea that the symptoms appear very similar, which can lead to mismanagement in the PES. The patients with both cocaine abuse and schizophrenia presented with more hallucinatory experience than the other two groups. Those with cocaine abuse or schizophrenia alone looked very similar. As many as 50% of schizophrenic patients were substance abusers. (Zealberg & Brady, 1999) This study indicates that individuals with comorbid substance abuse and schizophrenia have poor medication compliance, more homelessness, and increased hospitalizations. Because many schizophrenics convey paranoid thinking, they may be more apt to be guarded about their drug use. One study indicated that clinical interviews detected less than 50% of the positive test findings. Because of this, it is critical to evaluate the cause of psychotic exacerbation by doing a urine drug screen when drug and/or alcohol misuse is suspected.

As many as 98% of individuals presenting for substance-abuse treatment have some symptoms of depression (Milner, et al. 1999). Depression and suicidal ideation are often associated with withdrawal states from substances. While in this state of intoxication or withdrawal, judgment is impaired and impulsivity increased. Substance use is implicated in more than 50% of suicide attempts and completed suicides. Patients who have a violent presentation are most likely to be male, be substance abusers, be diagnosed as schizophrenic, have a history of violence and have a low GAF (Oster, et al., 2001). States of intoxication or withdrawal from substances are among the most prevalent causes of acute psychosis (Forster, et al., 1999). Withdrawal from sedatives or alcohol can also produce psychotic symptoms, such as hallucinations, paranoia, and hyperactivity.

Psychosocial Stressors

Psychosocial stressors will be defined using the criteria in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revision, (2000) as follows:

> A psychosocial or environmental problem may be a negative life event, an environmental difficulty or deficiency, a familial or other interpersonal stress, an inadequacy of social support or personal resources, or other problems relating to the context in which a person's difficulties have developed. (p.31)

The PES is used as primary "drop-in" care by elective patients who are socially isolated and economically deprived. Often, it is the lack of an available social network, not necessarily the

severity of psychopathology, that constitutes an emergency (Bassuk, et al., 1983). Allen (1999) defined an emergency as "a set of circumstances in which a catastrophic outcome is thought to be imminent and the resources available to understand and deal with the situation are unavailable at the time and place of the occurrence" (p. 713). The patient perceives a mismatch of his or her needs and the resources available. Mezzina and Vidoni (1995) convey a similar point of view in their definition of crisis as linked to the idea of behavioral problems and to social threat or danger. It is considered a "social emergency." Gerson and Bassuk (1980) saw that the PES was increasingly being used as a source of support rather than for "true" psychiatric emergencies. The study expresses the concern that the pressured atmosphere of the PES may lead the therapists to classify the patients by their most obvious symptoms as the chief dispositional determinants, rather than the related social situation.

It is important to bear in mind that though clinical diagnosis is essential, it can be exacerbated by, or lead to, an exacerbation of psychosocial stressors; often it is a cyclical relationship. Therefore, it is important to complement the psychopathological focus with an understanding of the patient's environmental and situational precipitators. The presence of multiple social factors may provoke the urgency of the situation. Schnyder, et al. (1999) acknowledge that the disorder-oriented perspective should also be focusing on a systemic approach to treatment that focuses on psychosocial stressors. Results of the study examining the determinants of psychiatric hospitalization done by Lidz, et al. (2000) conclude that PES decisions are influenced more by situational factors and social control concerns than diagnosis.

Harrison (1995) confirmed there is a strong correlation between measures of social deprivation and psychiatric admission rates. Kent and Yellowless (1994) conclude that social factors contribute substantially (38.9%) to hospital readmissions. Schnyder, et al. (1999) report

the PES presenter as having a high incidence of living alone, being unemployed, experiencing social disintegration and therefore experiencing a high level of psychological vulnerability. Ruggeri and Tansella (2002) found that social needs are more difficult to meet than clinical needs. It is those patients with the unmet social needs that are more often seen in inpatient hospitals.

A study conducted by Friedman, et al. (1981) took place in an inner-city hospital, which serves a predominantly impoverished population. The sample included a poorly educated, a low socioeconomic status, and a predominantly African American population. One of the main objectives of the study was to collect information on the patients' support system, as well as information about their social, work, and community functioning. Only 2.6% reported working "mostly full-time" and 45.2% reported not working three months prior to their presentation. Sixty percent of the patients who presented to the PES did not complete high school. Sixty-six percent of the patients report living with one other person, 21.3% live alone, and 5.3% of the patients were homeless. Data was collected on social, work and family adjustment on a scale of one to five and 69% of the patients were rated as having poor to extremely poor social adjustment in the last three months and 49.4% were rated as having poor to extremely poor lifelong social adjustment. More than 41% of patients who presented were given ratings of extremely poor life-long family adjustment (totally alienated) or poor life-long family adjustment (fighting all the time). Poor adjustment in these areas was associated with increased hospitalization. With mental illness, and limited financial and social resources, these patients are under great stress. This study emphasized the need for psychiatric interventions, as well as social, economic, and familial interventions.

In a study aimed at identifying the clinical and social characteristics of PES presenters,

Hatfield, et al. (2000) asked doctors to summarize the factors most contributing to crisis. The most frequently rated dimensions were those reflective of psychosocial contributors. They rated top contributing factors as follows: "chronic social difficulties" in 49%, "substance misuse" in 50%, and "poor coping skills/resilience" in 72.5%. If those who are in need of social services are not connected to case management or other community support, the chances of their becoming repeat presenters as a method for accessing help is probable (Hatfield, et al.). Mattioni, et al. (1999) describes the repeat presenters as the revolving door group of seriously ill individuals who have little economic and social support.

Problems with primary support. The presence or absence of social support resources play a critical role in the decision-making process of whether a patient was hospitalized for treatment of mental illness (Mendel & Rapport, 1969). Absence of social support can be conceived as dysfunctional relationships, loneliness, social isolation, lack of professional or natural social supports (Kent & Yellowless, 1994). Overall, less social support predicts increased psychopathology (Wu & Serper, 1999). Patients who are living alone and are unemployed have an increased vulnerability (Schnyder, et al., 1999). Gerson and Bassuk's (1980) review of PES and dispositional determinants proposes a model evaluating the patient's and the community's adaptive resources, rather than focusing on diagnosis. Their article suggests using seven factors as the basis of evaluation. The factor that they put as the first (suggesting primary importance) is: "the nature and availability of the support system, and the capacity of the patient to use it (p. 9)." For those emergencies arising primarily as a result of psychosocial reasons, where mental illness is not diagnosed, problems would be more effectively addressed in the social context

(Hatfield, et al., 2000), and that many hospitalizations could have been avoided if there had been a more supportive social milieu (Gerson & Bassuk, 1980). However, lack of contact with the appropriate services will often drive these individuals to seek help at the PES.

The support of family, friends, or community services has a strong influence on the disposition decision. The availability of these supports appears to decrease the likelihood that the patient will be hospitalized (Marson, et al., 1988). Mendel and Rapport (1969) found that the PES decision-makers felt that 84% of the patients who were hospitalized would have gotten a different disposition had more social support resources been available to the patient. It must also be noted that the mere presence of family members in the PES does not necessarily indicate these family members were supportive. Munizza, et al. (1993) state that 80% of patients coming into a PES accompanied by a family member experience interfamilial stress. Bassuk and Gerson (1980) suggest that poor social support and a weak link with other treatment services were characteristics of repeat presenters.

Schnyder and associates (1999) report that the most frequently reported stressors precipitating the current crisis are conflicts with close relationships. Kent and Yellowless (1994) agree with the outcome that relationship conflict is a major contributor (61.1%) to the decision to hospitalize this population of repeat presenters.

One example of the negative effects of poor social support is the extremely high prevalence of past victimization among women who present to the PES. The presence of an abuse history can serve as a significant risk factor for the development of later psychological symptoms and disorders (Briere, Woo, McRae, Foltz, & Sitzman, 1997). In one review of the literature (Buttefield, Panzer, & Forneris, 1999) prevalence rates range from 15% to 38% of female PES presenters who have experienced childhood sexual abuse, 13% to 20% have

experienced adult rape, and 20% have been battered. This review indicates that evidence suggests that victimization is the most powerful predictor of health care cost. Some of the diagnoses associated with victimization history are depression, Post -traumatic Stress Disorder, and Borderline Personality Disorder. According to Goodman, Saxe and Harvey (1991), it is common among victims of a traumatic event, such as abuse, to socially isolate, withdraw, and engage in substance use or self-mutilation. This study also reviews literature which suggests that a large percentage of homeless women have history of traumatic victimization. Forty-three percent were raped and 74% report having a history of physical abuse. There are even higher rates of victimization among females with substance abuse disorders (Buttefield, et al.). These studies suggest that the traumatic effects of this abuse compounds with other psychosocial stressors, such as homelessness or substance abuse, to produce psychological distress enough to cause crisis and bring these individuals to seek treatment at the PES.

Problems related to the social environment. Relationship conflicts were the most commonly identified source of difficulty, which precipitated a crisis (Hatfield, et al., 2000; Schnyder, et al., 1999). There is a high incidence of subjects living alone and being unemployed, which indicates social isolation and psychological vulnerability (Schnyder, et al.). Turrina, et al., (1999) report that a lack of social support increased the probability of a patient being admitted by more than three times that of a patient with intact social supports. The main results of this study indicate that the severity of symptoms as measured by the Global Assessment Scale [GAS] and lack of social support were significantly associated with hospitalization, whereas diagnosis and suicidal behavior were not significant. It is important to note that the assessments were done in the community as opposed to in the PES, which may have

had an effect on these surprising results. Harrison (1995) also found a significant correlation between social deprivation and psychiatric admission rates. Some of the variables making up "social deprivation" were unemployment, unskilled and lone parents.

Educational problems. According to Currier, Sitzman, and Trenton (2001), who reviewed literacy in the PES, approximately 42 million adults in the United States do not have the necessary reading skills to understand basic written materials. Psychiatric patients tend to have a significantly lower level of reading ability. Twenty percent of the general population scored below the seventh-grade level on reading comprehension, as compared to 54% of the psychiatric population. This study found that half of the PES presenters studied were unable to read at a high school level. The results found that reading scores were correlated to IQ, but not to patient age or last grade completed. These findings indicate that one cannot assume an individual is literate as a result of school completed or age.

Occupational problems. Hatfield, et al. (2000) assessed that less than one quarter of PES presenters were employed. Turrina, et al., (1999) report that 48% of subjects were unemployed. The results of another study (Friedman, et al., 1981) found that 51% of patients were supported by public assistance and only 11% described themselves as working either full-time or part-time. Nine percent of the patients say they have no means of support and the remaining 20% are supported by friends and family. Kent and Yellowless (1994) state that 13% of admissions in their study involved employment problems.

Housing problems. According to Vermeiren and Van Oost (1999), crisis intervention and psychotherapy are not sufficient to reduce decompensation risk if the home environment is too unsafe or overwhelming for the individual. Homelessness is a common psychosocial stressor seen in the PES (Simon & Goetz, 1999). Individuals who are homeless may present with a specific request for shelter and food, or may state that they are suicidal or homicidal to receive secondary gains through admission to inpatient psychiatric hospitalization. Friedman and colleagues (1981) report that 13% of the patients who went into the hospital were admitted by the clinician because the patient had no residence. A thorough evaluation must be completed regardless of the suspicions that past experience with the homeless population may generate. There is a high concentration of mental illness, as well as drug abuse among homeless people who, therefore, may truly require emergency treatment.

Goodman and associates (1991) view homelessness as a risk factor for mental illness. The authors believe that the gradual or sudden loss of one's home is a severe enough stressor to produce "psychological trauma." Psychological trauma is defined as "a set of responses to extraordinary, emotionally overwhelming, and personally uncontrollable life events" (p. 1220). They also feel that the conditions of shelter life, such as loss of autonomy, loss of stability, and possible loss of safety, add to this trauma. Homelessness may also exacerbate symptoms of past victimization or other psychological problems. The lack of perceived security that homelessness would inevitably elicit is compounded by lack of social support and relatedness with others. Perhaps with this view of the interaction of psychological trauma and homelessness, we can gain a better understanding of where the mental health system deficits are that need to be addressed in order to decrease the utilization of the PES by the homeless.

A study examining 475 individuals at a PES in Arizona found that 33% of that population met criteria for "homelessness" (living in the streets, shelters, or cars) in the three months prior to presentation (Bachrach, Santiago, & Berren, 1990). The results of this study indicate that the homeless mentally ill who utilize the PES services have very limited financial and social resources. The nature of their unstable residence makes it difficult for them to consistently comply with other services that are available. This often puts increased responsibility on the PES workers to coordinate care and additional services.

Psychiatric patients exhibit a higher level of risk factors for homelessness. Wu and Serper (1999) compared social support and psychopathology between homeless and domiciled psychiatric patients. The results showed that homeless individuals have impoverished social relationships and perceived their social support networks as being less supportive and available. Surprisingly, both groups had equivalent demographic backgrounds, including diagnosis, past psychiatric hospitalizations, substance use, marital status and employment status. Less social support predicted increased psychopathology.

Economic problems. The review by Gerson and Bassuk (1980) deemed that "lower-class" patients were over-represented at the PES due to lack of other resources, and that "upper-class" patients were hospitalized less frequently. In their review they see a trend in the literature suggesting that lower SES patients utilize the PES for nonemergent reasons, whereas higher SES individuals may have access to private treatment. It is questionable as to whether this information is currently valid. Harrison (1995) found that less inpatient treatment is available to those who have neurotic disorder in areas of socioeconomic deprivation. This is due to decreased

room for inpatient affective disorders because the deprived areas tend to have a higher percentage of patients with psychosis.

Problems with access to health care services. If patients who are connected to mental health services are still presenting to the PES, it raises the question of the compliance of the individual, or the adequacy of the services being provided. Results of Hatfield, et al. (2000) report that 35.9% are receiving psychiatric contact, 20.6% were receiving services similar to case management, and 41.8% were recorded as having no previous psychiatric contact. If individuals are connected to a mental health source in the community, (i.e., case management service, partial day program, medication, etc.), and are compliant with their care, they may be less apt to present to the PES**.** However, they have been chosen to receive these services due to a severe mental illness and complex needs. Therefore, if they have been compliant with their treatment, a presentation may indicate a true psychiatric emergency, rather than the patients seeking help primarily because they have no other social supports.

The goal of providing the patient with alternative treatment is to reduce hospitalizations by treating the patient on a consistent basis in an attempt to prevent a crisis from occurring, and to provide continuity of care after a crisis occurs (Mezzina & Vidoni, 1995). In an attempt to stop the "revolving door" of repeat PES presenters, it is important to assess the effectiveness of alternative treatments versus hospitalizations. Kent and Yellowless (1994) emphasize the importance of providing appropriate resources and continuous case management services to avoid a presentation at the PES due to a social crisis. The goal of these supportive services is to provide assistance to the patient and aid in improving the individual's relationships with other agencies in the areas of employment, housing, income support, legal and recreational matters.

Problems related to interaction with the legal system. When a mentally ill individual engages in disruptive behavior in the community, the police often get involved and will refer this person to the PES. A study by McNiel, et al. (1991) retrospectively evaluated charts to determine specific demographic and relevant clinical information about patients who were referred by police to a PES. The results indicate that 33.6% of the 321 patients evaluated were referred by police. There were different clinical characteristics noted, in that those who were police-referred exhibited more psychiatric impairment and were more likely to be assaultive and threatening prior to admission and while being evaluated. They report no higher inpatient hospitalizations, though there were more involuntary than voluntary commitments for those who were hospitalized. Stefanis, et al. (1999) support that those patients brought in by police were the most violent and psychotic. However, they did find that there was a significant difference in hospitalization rates in that two-thirds of these patients were admitted.

It is important for the PES clinician to assess whether the alleged criminal behavior that may have prompted the police to bring the patient to the PES is caused by a mental disorder that required emergency treatment (Simon & Goetz, 1999). The clinician may need to determine if the patient has antisocial personality disorder, which often does not require emergency treatment or antisocial behavior that is the result of another disorder. One way to make this distinction between criminal and mentally disordered behavior is to determine whether the patient is experiencing command hallucinations which are driving them. Poor social support and limited engagement with treatment systems were characteristic of repeat offenders (Bassuk, et al., 1983). There is a lack of research on legal history as it pertains to the PES presenter.

Other psychosocial and environmental problems. "Other psychosocial and environmental problems" are defined in the DSM-IV-TR (American Psychological Association, 2000) as: "e.g. exposure to disasters, war, other hostilities; discord with non-family caregiver such as counselor, social worker, or physician; unavailability of social service agencies" (p. 32). An example of "other psychosocial and environmental problems" is the recent terrorist attacks on our nation and the subsequent "War on Terror." These circumstances have brought psychosocial stressors and crisis situations to the forefront of public awareness. Associated with this most recent wartime situation is the constancy of threat and grief over the magnitude of loss, which may have the effect of causing or exacerbating psychological symptoms. A study by Galea, et al. (2002) concluded that acute PTSD and depression levels increased in Manhattan following the September 11th attacks. Twenty percent of the subjects who lived close to the World Trade Center buildings met criteria for PTSD and 9.7% reported current depression. Goldman (2002) examined request for services following September 11th and found most of the initial requests had come from people who were currently in treatment or who had previously had mental health services. The situations falling into this category are not often seen in the patient's presenting problem. It is extremely important that the PES worker be equipped with the knowledge of how to deal with a patient who may have just experienced a disaster-related trauma, as well as how to assess if the patient's reaction to the trauma is considered "normal" or if this person needs to be admitted to an inpatient facility. Similarly, if an individual has a psychiatric history, the loss of, or discord with a nonfamily caregiver on which this patient has been dependent can be as traumatic as any disaster.

Urban versus Suburban

Munizza, et al. (1993), in referring to the social dimension of emergency, state "The concept of emergency is strongly influenced by the context and the culture in which it appears" (p. 6). It would seem that psychosocial stressors, as well as other variables, would tend to differ in rural versus urban settings, though there does not appear to be any studies that address this specific comparison in the PES. The majority of studies utilize populations in an urban environment (Bassuk, et al., 1983; Gerson & Bassuk, 1980; Hendryx & Rohland, 1997; Lidz, et al., 2000; Marson, et al., 1988; Spooren & Jannes, 1997; Stefanis, et al., 1999; Way & Banks, 2001). However, there were a few studies conducted at PES in a suburban or rural environment (Greenberg, et al., 1995; Hatfield, et al. 2000; Lieberman & Baker, 1985; Segal, Laurie, & Segal, 2001; Yates, et al., 2000). There is very limited information on the comparison between suburban and rural PES. The one study that examined some of the demographic variables of a rural community health center indicated that 99% of the patients were Caucasian (Sobel, et al., 1998). This study failed to look at any clinical circumstances of the emergency contacts reviewed and was therefore of limited use. Another study (Yates, et al., 2000) sought to investigate admission patterns in rural England to see if they were similar to trends found in urban areas of England. Though the study examined inpatient facilities, it is still useful to understand the rural/urban comparison. The rural area is described as having a low (< 1%) ethnic minority population and more stable communities. The results of this study suggest that the increase in the acute psychiatric facility presentation does mirror England's national trends observed in urban settings. The findings show upward trends in young men, substance misuse

problems, accident and emergency referrals and out-of-hours admissions.

Burgy and Hafner-Ranabauer (1998) investigated the utilization rates of the city and suburban PES, and how ecological, distance-related and diagnostic factors influence those rates. They found that contact rates with the PES are higher in the city than toward the outskirts. More specifically, the study found that living conditions and socioeconomic status tend to improve toward the outskirts and were worse in the city center where inhabitants live closer to the emergency services. Also, with increasing distance between residence and service location, which tends to occur more in the suburbs, the utilization rates decrease. Diagnostically, the study found more schizophrenia and substance abuse in the city PES.

Another study examined "county drift" (Breslow, Klinger, & Erickson, 1998), which is the tendency for chronic psychiatric patients to move to the central county containing the PES. This means moving from the outlying suburban counties to the urban central county, which may be better equipped to provide treatment for complicated cases. Patients who present with multiple diagnoses, which may include substance abuse or personality disorder in addition to Axis I diagnosis, were more apt to move closer to the central county. The authors hypothesize that the tendency to refer to aftercare facilities in the central vicinity may also foster this migration. It is important to understand the causes of this drift so that appropriate treatment services can be provided in all areas to prevent this from occurring. This residential instability was found to be associated with increased PES use.

Other Variables

Medical problems (Axis III). Mentally ill individuals tend to make inefficient use of the health care system, using urgent and emergent care as opposed to preventive or routine (Berren, Santiago, Zent, & Carbone, 1999). Often, the patient's psychiatric symptoms make it difficult for the individual to detect or communicate his or her own health problems which, in turn, affects the patient's compliance with treatment. More important than inefficient spending, is the fact that the patient is putting himself at great risk. One study demonstrated higher mortality rates for severely mentally ill patients than for the general population (Felker, Yazel, & Short, 1996). This is true of both natural causes and accidents. The results of the Berren, et al. study, which examine the trends in health care utilization among the mentally ill, suggest the mentally ill patients use the health care system inefficiently and that there is a great need for coordination of care among the mentally ill to improve this. Mezzich, et al. (1984) report that Axis III disorders, of whom 5% of subjects were diagnosed, broadly included: endocrine disorders, neurologic disorders, and cardiovascular disorders. None of these categories were significantly associated with psychiatric admittance.

Another health care issue involving the medical problems and emergencies is the patient presenting at the emergency room who is conveying psychiatric symptoms. One study found that 10% of general emergency room visits were referred for psychiatric assessment (Baxter, et al., 1968). The patient must be evaluated initially to rule out any medical conditions that may be causing psychiatric symptoms or may be exacerbating a pre-existing psychiatric illness (Lagomasino, Daly, & Stoudemire, 1999). The patient should be medically cleared to be at the PES. Some of the medical causes for abnormal behavior are: medications, illegal substances or

alcohol, withdrawal syndromes, neurological, metabolic, or endocrine abnormalities, infectious diseases or other medical conditions (Lagomasino, et al.). A patient may present to the ED as agitated, delirious or psychotic, which makes it extremely difficult for the clinician to give a careful physical exam and to do a diagnostic interview. The psychiatric patient is at increased risk of the potential physical causes not being addressed due to the assumption that the behavior is normal for the mentally ill patient.

Conversely, many patients who are seeking medical treatment for a physical ailment, or perceived physical ailment at a medical emergency department may be experiencing psychopathological conditions. A study conducted by Marchesi, et al. (2001) found that 32% of their subjects, who included presenters to a medical emergency department described a specific anxiety or depressive disorder. However, they found that in most of these patients the ED physicians did not treat the mental disorders. Self-referral is the most common reason for attendance for these patients. Diagnosis of psychological disorders that may be the cause of the presenting problem (i.e., panic disorder) are important to diagnose so that the appropriate disorder is addressed, and medical services are not used inefficiently. The PES staff must work in conjunction with the ED staff to make the proper determination as to the etiology of the symptoms so that the appropriate care is given, be it medical or psychiatric. Patients who present to the PES with legitimate medical problems, and who are also in need of psychiatric treatment, also present a potentially difficult situation. This may greatly affect the disposition decision, because there are limited placements for those patients experiencing serious medical problems.

Suicidality. When considering the most prevalent factors associated with the PES, the first variable that most workers assess is the patient's potential to harm self or others. A patient's denial of suicidal intent and a willingness to "contract for safety" is an insufficient means of determining the potential for self-harm. It is essential that the clinician perform suicide risk assessments for those patients who present with suicidal ideation to the PES (Simon & Goetz, 1999). A thorough suicide risk assessment must be performed for individuals who present with major depression. Those who also experience psychosis, poor health, comorbid substance abuse, previous suicide attempts and family history of completed suicide have an increased risk. Individuals who also have an increased risk are those who are male, advanced age, unmarried, and socially isolated (Milner, et al., 1999; Beautrais, 2001).

The results of the Schnyder and Valach (1997) study, which examined suicide attempters versus a control group at a PES in Switzerland, indicate that adjustment disorder is the most likely diagnosis and that, surprisingly, suicide attempters had relatively good psychosocial supports, both occupational and interpersonal. Suicide attempters were more apt to live with family members than in a shelter. The authors speculate this contrary outcome results from the fact that a suicide attempt is more closely related to an interpersonal crisis involving impending separation, as opposed to isolation due to a true loss. Such a true loss, which is the most frequent stressor triggering a depressive state, might be more apt to lead the person to be a suicide completer. Disposition results indicate 56.9% of suicide attempters were hospitalized versus 46.1% of the comparison group (Schnyder & Valach). The authors suggest that the very strong social support these suicide attempters have may predispose them to outpatient care, rather than inpatient hospitalization in which they are too often placed.

Beautrais (2001) compares characteristics of suicides, suicide attempts and a control

group. The results suggest that there are clearly overlapping predictors to both attempters and completers including: current psychiatric disorder, previous suicide attempts, previous psychiatric care and contact, social disadvantage and exposure to recent stressful life events. Results of this study also suggest differences between completers and attempters such that completers are more likely to be males suffering from nonaffective psychosis, while attempters are more likely to be females with anxiety disorder. According to Lamberg (2002) women attempt suicide twice as often as men, but men complete suicide four times as often as women. Individuals with schizophrenia, bipolar disorder, depression and addictions commonly convey suicidal ideation (Rives, 1999). It is essential for the clinician to perform a suicide risk assessment analyzing the lethality of suicidality by evaluating extent of intent, method, and access.

Patient violence. Patient's threatening violence toward a specific individual brings up a complex issue for the PES clinician. It is a clinician's ethical and legal duty to warn endangered parties when patients make serious threats toward specific individuals (Simon & Goetz, 1999). However, this often conflicts with the need to maintain patient confidentiality. When there is a clearly identified potential victim of imminent and serious harm, the duty to warn that potential victim precludes patient confidentiality. This is grounds for involuntary hospitalization.

An article written by Munizza, et al. (1993), which reviewed journal articles addressing psychiatric emergency literature from 1987-1992, defined violent behavior as the threat of a physical attack on an object or person, an actual attack on an object or person, or a verbal attack. Psychiatric patients have been known to become verbally or physically assaultive toward staff at the PES during the assessment process. This review finds that much of the literature assigns

similar characteristics to the patients who act out violently. Those at risk are often young males of low socioeconomic status who are diagnosed with either schizophrenia or bipolar disorder and have been involuntarily committed. One study mentioned by Munizza, et al. indicated that 40% of involuntary commitments acted out violently prior to hospitalization. Both schizophrenia and mania put patients at higher risk for violence than other diagnoses when outside; however, during hospitalization manic patients are at higher risk. Substance abuse is an additional factor as is a history of violent behavior. The PES environment, which may be overcrowded and have inexperienced staff members, may also affect the violent tendency. There is a low incidence of mood disorder in the violent patient; however, there is not a low incidence of suicide risk for the violent patient, which may be a result of anger and impulsivity.

Due to this threat it seems that all staff should be trained in prevention and containment techniques. In managing patient violence, the least restrictive means are to be used; however, if a patient becomes aggressive or assaultive, the methods of restraints or seclusion are often employed. The PES is responsible for the appropriate application and monitoring of clinical staff, and requirements for patient safety. This violent behavior has an effect on disposition decisions. If a patient is assaultive within the constraints of the PES, this is a clear example of how his behavior may be if he is discharged. Gerson & Bassuk (1980) express concern about the legal and ethical responsibilities the PES clinician has when considering the health and safety of others. They feel that the combination of legal issues, concern about personal safety, and the fact that many PES presenters have a history of violent and self-destructive behavior will lead the PES clinician to be hypervigilant to the indicators of danger, which would indeed affect the disposition decision.

Referral source. A study by Lidz, et al. (2000) indicates that disposition decisions appear to be more influenced by who accompanies the patient rather than clinical or demographic variables. They found that this accompaniment variable was the highest predictor for admission and commitment. This "accompaniment" variable assessed whether the patient was either (a) accompanied by the police or other formal relationship (social worker, etc.), (b) accompanied by a family member or friend, or (c) self-referred. The results indicate a greater chance of being admitted if patient is accompanied by another, than had he or she presented alone.

This is seen as reasonable in the case of a police-referred patient in that these individuals would be more likely to have been engaging in violent or suicidal behavior. Police are often the frontline crisis intervention providers especially for underprivileged areas (Watson, Segal, & Newhill, 1993). Stefanis, et al. (1999) support that those patients brought in by police were the most violent and most were psychotic; two-thirds of these patients were admitted. A study by Sales (1991) found a significant difference in the amount of police-referred patients who were committed. The results of this study indicate that almost half of police-referred patients went on to be hospitalized versus one fifth for patients with other referral sources. These patients were seen as much more severely mentally ill; half required restraints and one-quarter required medication.

Lidz and colleagues (2000) found that there was a strong tendency to commit when the patient was police-referred. Schnyder and coresearchers (1999) also found that patients brought to the PES by police, ambulance, or other health care provider had a higher chance of involuntary commitment. It seems likely that in our litigious society, police concern about a patient is likely to have an impact on the disposition decisions made (Marson, et al., 1988).

Results of a study done by Breslow, et al. (2000) from 1990 to1995 indicate that police-referred/mobile team patients rose from 19.7% to 25.7%. The appropriateness of the police-referred patient is sometimes questioned (Sales, 1991). Watson, et al. (1993) found that these referrals were appropriate and that the police did not exercise undue influence on the decision to hospitalize. Rather, the study concluded that these patients were more psychiatrically disturbed, more dangerous to others and more gravely disabled.

According to a study conducted by Mattioni, et al. (1999), patients accompanied by or referred by a mental health professional had the greatest chance of being hospitalized and was 20 times greater than that of a patient who presented alone. They see this as being good continuity of care among service delivery providers. Accompaniment by family members has also been seen as an important, if overlooked, variable in the disposition decision. The presence of relatives upon presentation to the PES appears to influence the decision to hospitalize in that they have higher admission rates than if they presented alone (Friedman, et al., 1981). Tischler (1966) found that in only 13% of the patients did the disposition differ from the assessor's perception of the family's wishes. Mattioni, et al. (1999) found that patients accompanied by family members were two times as likely to be admitted inpatient than the patient who presented alone. The patient who self-refers may be viewed as demonstrating insight and a higher level of functioning regarding resources. The presence of a family member or friend who is encouraging hospitalization is an important aspect of the clinician's decision to admit (Marson, et al., 1988).

Disposition

The vital question in a PES evaluation is whether to release the patient into the community, or to admit to an inpatient psychiatric facility. These options are referred to as disposition decisions. There is a significant number of research studies that analyze the characteristics of the patients as they relate to the disposition decision. Most studies have identified what they deem as the most significant variables. These studies are reviewed in this section.

During this decision-making process, it is important that the patient receive the most appropriate treatment while at the PES. This treatment is a combination of rapport building, data gathering, and information-sharing. In a study by Alexius, Berg, and Aberg-Wistedt (2000), which evaluated patients' assessment of care, it appears that most patients were satisfied with their relationship with the treating staff member. However, patients reported low satisfaction with the information provided by staff, especially in regard to time schedule for treatment and expected treatment response. Satisfaction rate and treatment compliance appear to be related to adequately informed patients, which is an important component in evaluating the quality of care given at the PES. A high quality of care by the PES staff will not only facilitate appropriate decision-making as to the course of treatment, but may also influence patient functioning (Segal, Egley, Watson, & Goldfinger, 1995).

The psychiatric assessment conducted in the PES and the resulting disposition decision will have a major psychological and possibly fiscal impact on the patient, families, the community, and insurance providers (Way, Allen, Mumpower, Stewart, & Banks, 1998). If a patient is inappropriately released from the PES the threat of negative consequence may include

increased risk of suicide, increased risk of harm to others, increased burden on the support system, and exacerbation of symptoms (Way & Banks, 2001). In contrast, inappropriate decision to admit to a hospital may lead to stigmatizing the patient and disrupting family or employment status. It may also adversely affect the patient's ability to connect with appropriate outpatient services. Involuntary hospitalization is sought for patients who have a diagnosed mental illness, are a danger to self or others, and who are refusing treatment (Simon & Goetz, 1999). According to Bengelsdorf and Levy (1989), the necessary information needed to make the crucial decision of whether to admit the patient includes: dangerousness of individual, quality of support system, and the individual's ability to participate in treatment. These authors notice the importance of other variables, such as diagnosis and severity of symptoms, but consider that these are subsumed in the question of dangerousness. Arfken, Zeman, Yeager, Mischel and Amirsadri (2002) found that staff at a crisis center perceives patients to have frequent visits due to reasons with a psychosocial basis such as: difficulty accessing alternative services, need for food and shelter, and substance abuse. The role of the PES is also to prevent hospitalizations of those who can be treated in the community by reducing acute symptoms and stabilizing the patient to a level appropriate to be released back into the community with referrals to get connected or reconnected with a lower level of care (Segal, et al., 1995).

Making valid decisions regarding inpatient treatment is becoming increasingly important due to the rising number of presenters and increased emphasis on providing cost-effective treatment (Hendryx & Rohland, 1997). All of the aforementioned variables play a part in the core purpose of the PES, which is to arrive at a disposition decision that will best suit the patient and most efficiently utilize resources. The term "Disposition" as used here will be classified as (a) Hospitalization – voluntary, (b) Hospitalization – involuntary, or (c) Discharge with referral

to alternative treatment.

If a patient who presents to the PES is referred for outpatient treatment, there are certain patient characteristics that are associated with better adherence to the treatment plan. Successful referrals have been associated with having a place to live, the diagnosis of depression, and higher SES (Dobscha, Delucci, & Young, 1999). Those patients who presented with suicidal ideation are at high risk for not adhering to the referral and the homeless are also at a high risk for noncompliance with treatment. Individuals who meet criteria for substance use disorder are the least likely to adhere to recommended treatment. Spooren, Van Heerigan, and Jannes (1998) investigated the efficacy of outpatient aftercare referral and found that the characteristics of many PES presenters (impulsivity, substance abuse) decrease their chances of adherence to the aftercare plan. However, an arrangement of a fixed appointment and family involvement may increase compliance.

Glazer (1995) conveys the conservative approach to hospitalization. He states that patients should only be admitted into the hospital when their mental illness has deemed them so dangerous to self or others or so unable to "negotiate their hour-to-hour existence, that the inpatient approach is necessary." The decision to commit a patient involuntarily is a complex process. Clinicians make these decisions based on legal criteria, such as dangerousness to self or others; however, there are multiple factors affecting this decision. There are many articles discussing some of the patient characteristics that have been studied pertaining to the decision to commit, such as diagnosis, patients outside support and residential status (Rabinowitz, et al., 1995; Tischler, 1966; Way, et al., 1992). Engleman, Jobes, Berman, and Langbein (1998), however, found no significance with patient characteristics. Rather, the results of this study determined that the constructs most significantly associated with the decision to commit were:

the evaluation setting, the clinician's tendency to detain patients, and the availability of patient beds. Segal and colleagues (2001) conducted a study, which examines the variables involved in involuntary commitment in PES centers located in nine California general hospitals to see if other factors, such as institutional constraints or social bias, have an effect on the decision. Of the 583 patients, 109 (18.7%) were retained against their will. The commitment criteria in California is a dangerousness to self or others or a grave disability due to a mental disorder, and the results indicate that patients were generally afforded due process during the PES evaluation indicating appropriate involuntary commitment.

Social support and the presence of an obvious precipitating stressor were associated with referral to an outpatient crisis intervention service (Strakowski, et al., 1995). The results of the Schnyder, et al. (1999) study indicate that this subgroup had more patients that were employed, that were married, and were living with others. There were no homeless people in this subgroup. Presenting problems were often work-related or involved relationship conflict. The most common diagnoses in this subgroup were mood and adjustment disorders. There was less substance abuse than the inpatient group. It is important to note that these results are from a study conducted in a nonurban environment in Switzerland, and may not, therefore, be generalizable due to demographics, as well as different legislation. The authors also stated that violence and weapon carrying is seen less often in European emergency rooms than in American emergency rooms.

Way and Banks (2001) found that five variables were responsible for predicting the disposition outcome. In order of importance, those variables are: 1) danger to self, 2) psychosis, 3) care for self, 4) impulse control, and 5) depression. These findings suggest that these areas are considered to be the most important areas of assessment for dispositional decisions in the PES.

Schnyder and associates (1999) show that the patients who fall into the hospitalization subgroup are more apt to be psychotic, were referred by police, and have prior hospitalizations. This study indicates that 34% is the overall hospitalization rate. The study also points out that if a patient has adjustment disorder or has an identifiable precipitating stressor, his or her chances of being admitted are less. Hatfield, et al. (2000) results indicate that slightly more than 25% were hospitalized. Individuals who have been previously admitted to the hospital have a higher probability of being admitted again than those patients who have no hospitalization history (Mattioni, et al., 1999). Strakowski, et al. (1995) explore the racial effects on the final dispositional outcome. This study implies that there are racial differences and that African American patients are more likely to be hospitalized. They are also more likely to be involuntarily committed for hospitalization than similar Caucasian patients.

There is an ever-increasing amount of presenters to the PES who have a substance abuse diagnosis. This results in a complex problem in that substance use alone should not warrant psychiatric hospitalization; however the symptoms of the abuse might require the patient to be put into a higher level of care. Substance abuse exacerbates the disruptive and noncompliant behaviors of the chronically mentally ill. Also, if a patient presents primarily with substance abuse, many of the substances cause psychosis and mood disturbances (Breslow, et al., 2000). It is a function of the PES worker to make this distinction because it impacts the disposition decision and the appropriateness of placement. Breslow, et al., report that acute intoxication is negatively correlated with psychiatric hospitalization. The potential explanation for this is that once the effects of the substance have worn off, the psychiatric condition, either psychosis or suicidality also wanes.

Because psychosocial stressors are situational and difficult to operationalize, unclear

indicators often present a problem to the crisis worker making the disposition decision. The staff members may have different interpretations as to the extent to which some of these variables impact client impairment. There is a high level of variability among treatment recommendations (Way, et al., 1992). Hendryx and Rohland, (1997) conducted a study examining the reliability of self-reported psychiatric hospitalization decision-making at a CMHC in which the results demonstrated the need to improve reliability of hospitalization decisions.

Dispositional decisions may also be affected by external factors, such as insurance companies and legal sanctions, or may depend on local legislation concerning hospital care and commitment (Hendryx & Rohland, 1997). The rapid expansion of managed care has increasingly influenced the decision-making process in the PES. This means that dispositional decisions are often influenced by persons who are removed from the actual site, but whose decisions pay particular attention to cost containment issues (Lyons, et al., 1997). This elicits concern that the emphasis on cost-containment, which often directly affects decisions about the treatment a patient receives, may also be eclipsing attention to patient care (Yohanna, 1998). Managed care has also increased the amount of time it takes to do an evaluation due to the need to negotiate and obtain an approval for services (Breslow, et al., 2000). In an article comparing characteristics of managed care versus nonmanaged care PES patients, Breslow, Klinger, and Erickson, (1996b) point out that this is counter to managed care's goal of increased efficiency. This study finds that there are two very different populations found in the managed care versus nonmanaged care groups. The nonmanaged care group needed more emergency community intervention, had more previous psychiatric hospitalizations, and had more psychotic and substance abuse disorders. It is extremely important to clarify that the patients receiving Medicaid were not required to enroll in managed care at the time of this study, which took place

in New York. Therefore, the differences in managed care status may be more representative of SES (Medicaid/uninsured versus Private Insurance obtained through employment) than insurance status. Gerson and Bassuk (1980) discuss the potentially unconscious process in dispositional decisions that might lead the therapist to make unwarranted hospitalizations, rather than release a patient who may engage in violent behavior. Findings of a study by George, Durbin, Sheldon & Goering (2002) on contextual characteristics and disposition suggest that patients with the most need are being hospitalized despite systemic pressures on inpatient services.

Summary and Conclusions

The PES has evolved into a critical source in mental health services provision. It is the chief entry point for individuals who are experiencing psychological problems. This proposal focuses on investigating the specific characteristics of individuals who seek such services with special emphasis on how the psychosocial factors impact the individual and influence the decision-making process concerning the next level of treatment. Gerson and Bassuk (1980) conclude with the statement that advances are needed in assessment procedures, dispositional planning, staffing patterns, and the structure of the PES. This was a valid request 20 years ago and should still be included in the PES goals. The knowledge from this investigation will lead to a better understanding of the presenting population with the goal of providing the best possible care and making appropriate referrals.

Statement of Purpose

The purpose of this investigation is to describe the clinical and psychosocial factors most commonly considered by mental health professionals in recommending psychiatric hospitalization. The variables being considered reflect components of a comprehensive diagnostic formulation, which considers psychiatric diagnoses, physical disorders, psychosocial stressors, and adaptive functioning (Mezzich, et al., 1984). The multiaxial system as outlined in the DSM-IV-TR (American Psychological Association, 2000) provided a systematic approach for viewing individuals, their history, and their environment. The current investigation: a) provides an overview of the demographic and clinical picture of the PES patient, b) explores the psychosocial risk factors of the PES presenter, and c) assesses how those psychosocial risk factors affect the treatment decision. There have been numerous studies evaluating the specific characteristics of the typical PES presenter; however, there is extremely limited research specifically evaluating the psychosocial risk factors of the crisis presenter, and how these factors affect the disposition decision.

This descriptive study investigated the characteristics of the typical crisis presenter at two sites in Southern New Jersey. It evaluated variables involving demographics and diagnosis and focused specifically on the role that the patient's psychosocial stressors have on the disposition decision. Many of the variables were classified by the Multiaxial Assessment System of the DSM-IV-TR (American Psychological Association, 2000). This provided a good format for assessing information on the patient's clinical diagnosis, medical condition, psychosocial problems, and level of functioning. For the purposes of this study, disposition is used to describe

the possible outcomes of the PES presenter as decided by the crisis worker. These include: inpatient hospitalization – voluntary, inpatient hospitalization – involuntary, and discharge home with referral to other resources.

This study contributed to the knowledge base of the staff working with the population in the PES by examining the characteristics that led these patients into crisis. The staff was better able to address the areas of concern for the patient and make a determination as to what level of treatment the patient was best suited. The results of this study will be useful in determining the type of services the patients need to keep them out of a crisis mode.

Research Questions

1) What are the most common psychosocial risk factors affecting the PES presenter, and how do these risk factors affect disposition?
2) What are the demographic and clinical characteristics associated with disposition?
3) Are there different patient presentations (demographics, clinical characteristics, and psychosocial stressors) at the urban site versus the suburban site?

Hypotheses

1) There will be fewer clients who present to the PES who are connected with case management services, and those that do present will have a decreased chance of being admitted.

2) Patients presenting to the PES with homelessness and disordered thinking will be hospitalized more often than those without this combination of presenting problems.

3) Patients presenting with homelessness as their primary presenting problem will be more likely to be discharged to community with referral.

4) Patients with social supports present will be more likely to be discharged to the community.

5) Patients who present with Substance Abuse will have more psychosocial stressors than those without a Substance Abuse diagnosis.

6) Patients who present with threat of harm to self or others will be admitted to the hospital.

7) There will be a higher number of psychosocial stressors in the presenters at the urban PES than in the suburban PES.

8) Presenters at the urban PES will report more housing problems, unemployment and lack of social support systems (as defined by the sections in the assessment: “Presenting Problem” “Environment/Home” “Relationships” and “Abuse/domestic violence” than those presenting at the suburban PES.

9) More presenters at the suburban PES will have reported relationship conflict and/or occupational stress than those presenting at the urban PES.

Chapter 2

Method

Subjects

This study retrospectively reviewed a total of 600 charts of individuals who presented to two Psychiatric Emergency Service sites in a one-year period between the July 1, 2001 and June 30, 2002. The purpose of this study was to provide a descriptive analysis of the characteristics of the PES presenter, including demographic, clinical, and psychosocial variables. The data reviewed was archival. The mental health professionals who originally collected the data had clinical work experience in assessing psychiatric presentations. They had a minimum of a bachelor's degree in psychology, or a related field, and had attended a required training on how to use a semistructured assessment tool. Clinical information was recorded by PES staff members who were not aware of this study at the time of the assessment. All information for this study was obtained from the date of the selected visit only, and no single patient was represented more than once in the sample. The PES computer system generated a list of patients and every 10^{th} was chosen until 300 subjects from each site were selected. After the subjects were selected, the investigator input variables of interest into a SPSS database (a statistical software package used to analyze data) from the subject's most recent PES visit. Five percent of the charts were randomly selected to be cross-referenced by another researcher to check agreement and to ensure inter-rater reliability. Those patients with the diagnosis of Mental

Retardation or a Pervasive Developmental Disorder were excluded due to the specific focus of this study. Patients younger than 18 were not examined. Individuals residing outside of the catchment area were not included in this study. In addition, those individuals receiving psychiatric emergency screening on a medical unit were excluded because the majority of these referrals were made by the hospital psychiatrist specifically for the purpose of initiating inpatient psychiatric hospitalization.

Design

This study employed a retrospective between group design to determine the weight of various influences and whether some of the variables examined played a causal role in PES decisions. It investigated the clinical and psychosocial differences that affected disposition, as well as compared characteristics of the patients who presented to the suburban and the urban sites. This study utilized archival data within a one-year period.

Setting and Apparatus

Data for the present study was based on chart information collected in two PES sites housed in hospitals, both within the same catchment area of New Jersey and both of which were run by the same umbrella nonprofit corporation. The hospitals served both private-sector and public-sector patients. The population was socioeconomically, ethnically and racially diverse.

This catchment area consisted of approximately 510,000 people. The county included one section of lower socioeconomic status whose inhabitants tend to present to what will be considered the urban site. There was another residential section of higher SES of which patients tended to present to the suburban site. This is due to proximity although the sites were only 5.5 miles away from each other.

Both PES centers were located inside the hospital and were open 7 days a week, 24 hours a day. The patients who presented for PES must first have been medically cleared by the general emergency room and were then referred to the PES. The PES program was staffed by psychiatrists, registered nurses, and bachelor and master level crisis workers who were trained to work at both crisis centers.

The PES program provided evaluation, triage, disposition and short-term crisis therapy. This year the combined staff completed approximately 7,000 evaluations. All individuals who presented for a psychiatric emergency evaluation were assessed by a crisis worker and received a comprehensive intake evaluation. The domains of the evaluation, in accordance with the American Psychiatric Association's Practice Guideline for Psychiatric Evaluation of Adults (1995) included: presenting problem, psychiatric history, medical history, developmental history, social history, occupational history, physical examination, mental status examination, functional assessment and additional information from the interview. In addition to the above information, the assessment form used in this study also detailed the following variables: demographic information, diagnoses, history of suicidal /homicidal behavior, history of abuse, legal history, current medication, referral source, and disposition. The site assessment tool used complies with the American Psychiatric Association's Practice Guideline for Psychiatric Evaluation of Adults (1995). According to these guidelines, the goals of the emergency evaluation are (a) to establish

a provisional diagnosis most likely responsible for the current emergency and to identify other diagnostic possibilities to be further evaluated in the future; (b) to identify relevant social, environmental and cultural issues relevant to treatment; (c) to determine if there is a risk of harm to self or others, and if the patient is willing to cooperate or if involuntary admission is needed; and (d) to determine the disposition of the patient, and to develop an immediate plan appropriate for admittance or discharge into the community.

Individuals presenting to the PES who were in need of inpatient psychiatric hospitalization were usually seen by the psychiatrist and were referred to one of the several hospital-based inpatient units, other private facilities, or one of the local state facilities. The crisis program also referred to a network of less intensive and more flexible community-based programs. These nonhospital referrals included outpatient psychotherapy treatment, a crisis house, partial hospitalization programs, substance abuse programs, and/or intensive case management services.

Procedures

The setting of the study involved one urban and one suburban PES center in a southern New Jersey county. The investigator examined a retrospective sample of charts that fell within a 12-month period (July 1, 2001 to June 30, 2002). All data was shelved before data collection began. A list of names was generated chronologically beginning July 1, 2001 from the daily tracking reports of PES visits. Every 10th patient was chosen until 600 subjects were selected. At no time were any names, phone numbers, or chart numbers recorded or linked back to any

subject. The agency computer system was used to separate PES setting (urban and suburban sites). Due to staffing issues, there were occasions when patients who would have normally been evaluated at the urban PES were diverted to the suburban PES. Dates for July 1, 2001 through June 30, 2001, where the PES was on divert status, were accessed from administrative staff prior to data collection and excluded from the study to ensure a true representation of the population presenting at each site.

The investigator input data from the selected charts into the SPSS database. Five percent of the charts selected were then cross-referenced with another researcher to ensure inter-rater reliability. The variables examined were operationally defined and were obtained from the specified sections of the assessment form also outlined in the Appendix.

Chapter 3

Results

This investigator examined 600 retrospective patient charts from two PESs, one urban center and one suburban center within five miles of each other. Every 10th patient was chosen until 600 were selected, 300 from each site. The findings of this study are presented first in terms of demographic, clinical and psychosocial characteristics of the PES patient, both in general and as a comparison between urban and suburban sites. Inter-rater reliability results are reviewed, and then the statistical results of each original hypothesis are presented.

All procedures were performed with the SPSS statistical package. Conventional descriptive statistics (mean and standard deviation) were used. The chi-square test of significance was used comparing categorical data in seven of the hypotheses. Two of the hypotheses required t-tests to analyze continuous variables across different groups. To determine significance, a value of $p \leq 0.05$ was considered to be statistically significant.

Descriptive Information

Demographic. The mean age at the time of emergency presentation was 36.6 (SD = 13.76), and age range was from 18 to 91 years. Analysis did not reveal a significant difference between genders of patients presenting (49.7% female, 50.3% male). The most prevalent ethnic backgrounds of the emergency population were Caucasian (58.8%), African American (27.8%), and Hispanic (12%). Analysis of marital status conveys that the

majority of patients who presented were never married (57%), followed by divorced, separated or widowed (22.1%) and married (20.8%). Education status can be broken down as follows: high school graduate (46%), did not graduate high school (30%), some college (16.7%), and college graduate (4.8%).

Clinical. Analysis of previous psychiatric treatment revealed approximately half had previous psychiatric inpatient hospitalizations (51.3%), nearly one-third (30.3%) were connected to outpatient treatment, and 7.8% were connected to case management services. The average number of visits to the PES within the year was 1.42 times (SD = .89) per presenter. The referral source for the majority of patients was as follows: self-referred (40.3%), family/friend (27.5%) or police (17.3%). Substance Abuse (18.2%) is reported as the most prevalent presenting problem, closely followed by suicidal ideation (16.2%) psychosocial stressors (13%), and depressed mood (7.8%). The four most frequent primary Axis I diagnoses were: depressive disorders (25%), adjustment disorder (16.7%), Bipolar disorder (10.5%), and Polysubstance related diagnoses (8.2%). The mean GAF score was 50.54 (SD = 13.38), and range of GAF was from 10 to 80. Patients were discharged into the community 68.2% of the time and were admitted to an inpatient facility, jail or a detox center 31.8% of the time.

Psychosocial. The majority of patients presenting to the PES were unemployed (42%), followed by employed (30%) and those with disability (22.5%). Patients presented to the PES with private insurance (25.2%), Medicare or Medicaid (41.5%) or no insurance (33.3%). The percentage of patients who were homeless was 11.6%. The average number of psychosocial

stressors recorded is 3.17 (SD = 1.92) with a range from (0-8) stressors.

Comparison Between Urban and Suburban Sites

There are some interesting differences in PES characteristics between urban and suburban sites including the prevalence and order of presenting problems. The primary presenting problems in the urban population were substance dependence (21.3%), psychosocial stressors (17.3%), and suicidal ideation (14.7%). In the suburban PES, the three most reported primary presenting problems were the same, but were in different order and a lower percentage of the suburban population experienced each as shown in the following results: suicidal ideation (17.7%), substance dependence (15%), and psychosocial stressors (8.7%). Also, the diagnoses were the same, but were in different order and had different prevalence. The most reported primary diagnoses in the urban population are substance related diagnoses (26.3%), depression (23%) and adjustment disorder (15.7%); and in the suburban site the diagnoses are depression (27%), adjustment disorder (17.7%) and substance related disorders (16.9%). It should be noted for clarification, that these percentages do not add up to 100% because discussion only includes the top three presenting problems and top three diagnoses per site. There are additional demographic, clinical and psychosocial variables, compared by site, in Table 1.

Table 1

Demographic, Clinical and Psychosocial Variables by Crisis Site

Variables	Urban	Suburban
Gender		
Male	52.3%	48.3%
Female	47.7%	51.7%
Mean Age	37.3 y.o.	35.9 y.o.
Ethnicity		
Caucasian	38.3%	79.3%
African Am.	42.0%	13.7%
Hispanic	18.7%	5.3%
Asian	0.3%	0.7%
Other	0.7%	1.0%
Marital Status		
Never Married	57.7%	56.3%
Married	19.0%	22.7%
Separated	6.0%	6.7%
Divorced	15.7%	9.3%
Widowed	1.7%	5.0%
Education		
Grade 8 or less	9.7%	1.7%
Grades 9 to 12	31.7%	17.0%

High School Graduate	38.0%	54.0%
Some College	14.0%	19.3%
College Graduate	3.3%	6.3%
Unknown	3.3%	1.7%
Referral Source		
Self	47.3%	33.3%
Family/Friend	19.0%	36.0%
Police	17.3%	17.3%
MH Agency	10.0%	8.0%
Other	6.3%	5.3%
Case Management		
Yes	10.3%	5.3%
No	89.7%	94.7%
Mean GAF Score	54	48
Mean Number Psychosocial stressors	3.7	2.7
Employment		
Part-time	11.0%	9.0%
Full-time	15.7%	24.3%
Student	--	0.7%
Retired	2.3%	4.3%
Public Assistance	3.0%	0.7%
Disability	18.0%	27.0%
Unemployed	50.0%	34.0%

Insurance		
Private	15.0%	35.3%
Medicaid/Medicare	44.7%	38.3%
No Insurance	40.3%	26.3%
Disposition		
Discharge	75.7%	59.7%
Admit to Hospital	24.3%	40.3%

Inter-rater Reliability

Thirty charts were crossreferenced with another researcher to ensure inter-rater reliability. Kappa value was computed and results indicate there was perfect agreement between raters (Kappa = 1.00) for the following categorical variables including: gender, education, marital status, employment, ethnic background, primary language, insurance, referral source, recent PES visit within 30 days, history of psychiatric inpatient treatment, current case management services, current partial care, current psychotropic medications, substance intoxication, history of suicidal behavior, history of homicidal behavior, history of abuse – victim, history of abuse – perpetrator, current legal involvement, Axis II, Axis III – primary, Axis III – secondary, Axis IV – educational problems (1), Axis IV – occupational problems (1), Axis IV – occupational problems (2), Axis IV – housing problems (1), Axis IV – economic problems, Axis IV – legal problems, Axis IV other psychosocial problems. There was also perfect agreement (Correlation Value = 1.00) for the following continuous variables: age, number of PES visits, and Axis V – GAF score. Table 2 provides the inter-rater agreement for the remaining variables. There were some variables that had no variation between raters. These are marked by an asterisk.

Table 2

Inter-rater Reliability

Variable	Kappa Value
Crisis Site	*
History of Psychiatric Outpatient	0.92
Current Outpatient Therapy	0.84
Primary Presenting Problem	0.93
Secondary Presenting Problem	0.96
Other Risk Factors	0.79
Legal History	0.92
Social Support Present	0.56
Primary Axis I	0.96
Secondary Axis I	0.95
Axis IV Problems with Primary Social Support (1)	0.88
Axis IV Problems with Primary Social Support (2)	0.61
Axis IV Educational Problems (2)	*
Axis IV Housing Problems (2)	*

Note: Kappa not able to be computed. At least one variable in each 2-way table upon which measures of association are computed is a constant.

Hypotheses

Hypothesis One. As predicted in Hypothesis 1, there were fewer patients presenting to the PES who were connected with case management services (n = 47, 7.8%) than those patients presenting without being connected with case management services (n = 553, 92.2%).

In contrast to the hypothesis, which predicted that those with case management would have a decreased chance of being admitted, a significantly greater proportion of patients presenting to the PES with case management were admitted to the hospital (n = 26, 55.3%) than patients who were admitted who were not connected with case management (n = 168, 30.4%), x^2 (1, N = 600) =12.31, p < 0.001.

Hypothesis Two. It was predicted that patients presenting with homelessness and disordered thinking had a greater chance of being admitted to the hospital. However, no significant difference was found between the proportion of patients presenting to the PES with homelessness and disordered thinking who were admitted to the hospital (n = 13, 44.8%), and the proportion of patients who presented to the PES without homelessness and disordered thinking who were admitted (n = 181, 31.7%), x^2 (1, N = 600) = 2.17, p > 0.05.

Hypothesis Three. It was predicted that patients with homelessness as their primary presenting problem would be more likely to be discharged. However, no significant difference was found between the proportion of patients presenting to the PES with homelessness as their primary presenting problem who were discharged into the community with a referral (n = 7, 87.5%), and those presenting to the PES without homelessness as their primary presenting

problem who were discharged (n = 399, 67.4%), x^2 (1, N = 600) = 1.45, p > 0.05.

Hypothesis Four. It was predicted that patients with social supports would be more likely to be discharged; however, no significant difference was found between the proportion of patients who present to the PES with social supports who were discharged (n = 288, 68%), and those patients who present to the PES without social supports and were discharged (n = 118, 66%), x^2 (1, N = 600) = .219, p > 0.05.

Hypothesis Five. In accord with the hypothesis, an independent sample t-test shows that patients who present to the PES with a substance abuse diagnosis had more psychosocial stressors (M = 3.79, SD = 1.96), than patients who present without a substance abuse diagnosis (M = 2.73, SD = 1.77), t(598) = 6.87, p < 0.001.

Hypothesis Six. In accord with the hypothesis, a significantly greater proportion of patients who presented to the PES with "threat of harm to self or others" were admitted to the hospital (n = 42, 50%) than those who presented to the PES without "threat of harm to self or others" and were admitted (n = 152, 29.5%), x^2 (1, N = 600) = 13.93, p < 0.001.

Hypothesis Seven. In accord with the hypothesis, an independent sample t-test shows that patients who present to the urban PES had more psychosocial stressors (M = 3.67, SD = 1.91), than patients who present to the suburban PES (M = 2.66, SD = 1.79), t (598) = 6.71, p < 0.001.

Hypothesis Eight. In accord with the hypothesis, presenters at the urban PES reported more homelessness (n = 44, 14.7%) than presenters at the suburban PES (n = 24, 8.0%), x^2 (1, N = 600) = 6.63, p < 0.001.

Presenters at the urban PES reported more unemployment (n = 159, 53.0%) than presenters at the suburban PES (n = 104, 34.7%), x^2 (1, N = 600) = 20.47, p < 0.001.

In addition, presenters at the urban PES reported more "lack of social support" (n = 132,

44.0%) than presenters at the suburban PES (n = 46, 15.3%), x^2 (1, N = 600) = 59.07, p < 0.001.

Hypothesis Nine. It was predicted that more presenters at the suburban site would report relationship conflict. However, no significant difference was found between the proportion of patients at the suburban PES who reported relationship conflict (n = 134, 44.7%) and those who presented to the urban PES who reported relationship conflict (n = 126, 42.0%), x^2 (1, N = 600) = .43, p > 0.05.

In accord with the hypothesis, a significantly greater proportion of presenters at the suburban PES report occupational stress (n = 27, 9.0%) than those at the urban site (n = 14, 4.7%), x^2 (1, N = 600) = 4.42, p < 0.05.

Chapter 4

Discussion

The PES has become an increasingly important component in the provision of mental health services. Deinstitutionalization, managed care and decreasing resources have contributed to a rapid increase in the volume and complexity of patients utilizing these services. The goal of the PES is to determine the appropriate level of care for the individuals who present in crisis. This descriptive observational study used various statistical analyses to determine how specific patient characteristics influence the decision to hospitalize. The goal was to determine whether a consistent, predictable relationship exists between specific variables, and to describe the nature of that relationship. The results of this study show that there is a relationship between demographic, clinical and psychosocial factors and their effect on disposition. Also, there are differences in the patients who present at the urban and the suburban site. Although psychosocial factors play an extremely important role in the psychiatric well being of all individuals, there are an extremely limited number of studies that investigate this relationship.

Descriptive Information

Demographic. The mean age of the 600 PES presenters in this study was 36.6 and age range was from 18 to 91 years. This age range is in accordance with Mattioni, et al. (1999), which found that 57.6% of patients fall within the age range of 30 to 49, and Sobel, et al. (1998), who found the average age to be 34.5 years. There was no significant difference between gender

of patients, nor was there any effect of gender on disposition decision. The most prevalent ethnic backgrounds were Caucasian and African American. As far as disposition decision, there was no difference between Caucasians and African Americans. Both had approximately one-third of presenters admitted to the hospital and two-thirds discharged into the community, which is in accord with the presenter in general. This finding supported the literature overviews of Gerson & Bassuk (1980) and Marson, et al. (1988) who found race was not a significant variable in the disposition decision and was in contrast to Strakowski, et al. (1995) who found that racial disparity exists in patterns of how mental health services are provided in that more African Americans are hospitalized than Caucasians. Approximately 20% of patients in this study were married, compared to 28% in Schnyder, et al. (1999) and 32% in Hatfield, et al. (2000). Approximately half had previous psychiatric inpatient treatment and nearly one-third were connected to outpatient treatment.

The referral source that most seems to influence the disposition decision to hospitalize is mental health agency, followed by family/friend, police, and self. This is consistent with the results of Lidz, et al. (2000) that patients have a greater chance of being admitted if they are accompanied by someone else. The results of this current study were also consistent with Mattioni, et al. (1999) who found that patients referred by a mental health provider have the greatest chance of being admitted (up to 20 times greater than if alone) and that presence of family also influences a decision to hospitalize. However, the studies of Stefanis, et al (1999), Sales (1991) and Lidz, et al. found police referral had a greater chance of being hospitalized, which is not supported by the current investigation.

Clinical. Suicidal behavior (28%) (ideation, gesture, attempt) is reported as the most prevalent presenting problem, followed by substance abuse (18.2%), psychosocial stressors (13%), and depressed mood (7.8%). Vermeiren and Van Oost (1999) identify the high-risk characteristics, which may cause an individual to present to the PES, as: psychiatric history of self or family, poor social support system, psychosocial crisis, and psychiatric complaints. The four most frequent primary Axis I diagnoses were: depressive disorders (25%), combined substance related disorders (21.7%), adjustment disorder (16.7%), and bipolar disorder (10.5%). Oster, et al. (2001) reviewed more than 10,000 charts and determined the most prevalent diagnoses to be: substance-induced psychotic disorder (23%), depressive disorder (23%), adjustment disorder (20%), and schizophrenia/psychosis not otherwise specified (19%). It is important to keep in mind the variability accompanying diagnosis in the PES. Lieberman and Baker (1985) found sufficient reliability for broad diagnostic categories of depression, psychosis and substance abuse; however, more specific subtypes of disorders were not sufficiently reliable. This may result from the relatively short assessment time the clinician has with the patient. The general diagnostic category may be sufficient for triage or emergency treatment; however, more specific subtypes should be explored and considered when patient is not in an emergent situation. The mean GAF score in this current study was found to be 50.5. Patients were discharged into the community 68.2% of the time and were admitted to an inpatient facility, jail or a detoxification center 31.8% of the time.

Psychosocial. The majority of patients were unemployed (42%), followed by employed (30%), those with disability (22.5%) and other (5.4%). These findings vary somewhat from Hatfield and colleagues (2000), who found three-quarters of patients were unemployed, and

Turrina, et al. (1999), who found 48% were unemployed. It is clear that there is a larger number of PES patients who are unemployed than those who are employed. Potential reasons for this might be that individuals who have a mental illness are less likely able to function in a working environment. They are less able to cope with the stressors that accompany employment. Also, unemployment may exacerbate an already existing mental illness. Patients had private insurance (25.2%), Medicare or Medicaid (41.5%) or no insurance (33.3%). The percentage of homeless patients was 11.6%, compared to 5.3% in Friedman, et al. (1981). One reason for this higher percentage might be that the city in which the urban site (from which half the data was collected) is located, is known to be one in great economic and psychosocial distress.

Comparison between Urban and Suburban PES Sites

The patient characteristics would seem to vary between the different settings in which the PES sites are located. The results of this study indicate some important differences between the patients seeking treatment at the urban versus suburban PESs. Demographically, the urban presenter is more often African American (42% versus 13% at the suburban site). Forty percent of the urban presenters did not graduate high school versus eighteen percent of the suburban population. Half of the urban presenters were unemployed versus approximately one-third of the suburban presenters. Though police referrals were equal, the urban site had more self-referrals and the suburban site had more referrals from family and friend, possibly indicating a higher level of support. The presenting problem of substance dependence is more prevalent (21%) in the urban site versus the suburban site (15%). Patients coming to the urban site report psychosocial

stressors as their presenting problem almost twice as often as the suburban patients. There are fewer patients from the urban site who are admitted (24%) than the patients who are admitted from the suburban site (40%).

Most of the studies reviewed examined PES in an urban setting. There were few studies comparing the PES in terms of urban versus suburban sites. The findings of the current investigation were consistent with Burgy and Hafner-Ranabauer (1998), who studied the comparison of an urban and a suburban site. The results of that study indicated that socioeconomic status was lower in the urban environment and there was a higher prevalence of schizophrenia and substance abuse in the urban PES.

The results of this investigation indicated the presenters at the two sites were quite different in many aspects. Substance dependence and psychosocial stressors were more prevalent in the urban site. This may be due to the lower socioeconomic status of the urban population. The crisis workers at each site should be aware of the differences between the urban and suburban presenters, and be able to determine how these differences may impact the disposition decision. The difference in disposition may be explained by the fact that inpatient hospitalization is not appropriate for those with primarily psychosocial concerns. Also, if a patient presents with substance dependence, an inpatient psychiatric facility may not be the best treatment option.

Inter-rater Reliability

The results of the inter-rater reliability show that all but one variable demonstrates significant agreement between raters. This indicates the two raters' interpretation of information provided on the assessment form was consistent. The significant agreement ranged from perfect agreement where Kappa and correlation values = 1.00 to .61. The variable that did not demonstrate significant agreement was "Social Support Present" = .56. One potential reason for the lack of agreement is the subjectivity of the crisis worker as to what constitutes social support and how they were able to document this in the assessment form. Overall, inter-rater agreement indicates reliability.

Hypotheses

PES Presenter and Case Management. Most of the patients who presented to the PES did not have case management services (92.2%). A significantly greater proportion of patients with case management were admitted to the hospital, than who were not connected with case management. Because the goal of case management is to assist individuals who are in need of coping with psychosocial stressors, this investigator predicted the presence of support would decrease their chances of being hospitalized. However, those with case management tend to have a higher level of pathology, which may increase chances of hospitalization. There is not extensive research on the effects of case management in general, especially on the relationship between case management and disposition at the PES. Hatfield, et al. (2000) predicted that if

those patients in need of support are not connected to case management, or other community support, there was a high probability they will become repeat presenters as a method for accessing help. They also stated that for emergencies that are psychosocially driven, these problems would be more effectively addressed in the social context.

The patients who were connected to case management services were in great distress. They tended to have more severe diagnoses, such as Schizophrenia (36.2%), Bipolar Disorder (23.4%), and Schizoaffective Disorder (17%), and less social support. Due to the severe nature of their problems, they tend to be in crisis more often. Because they had the extra support of the case manager, they had a better chance of complying with treatment and managing psychosocial stressors. However, when these patients are unable to function even with the assistance and support of a case manager, it may indicate that they are in serious need of hospitalization due to true psychiatric emergency, as opposed to presentation due to lack of support. There is a great need for research in this area to see if the support provided through case management is keeping the patients at a higher level of psychosocial functioning.

Homelessness and Disordered Thinking. No significant difference was found between the proportion of patients admitted to a hospital who were homeless and suffered disordered thinking and the proportion of patients who were admitted without the combination of homelessness and disordered thinking.

Many studies have shown that one of the most important determinants of inpatient admission is psychotic presentation of the patient (Marson, et al., 1988, Stiebel, et al., 2000, Way et al., 1992). Psychosocial stressors also have been shown to have a strong influence on the decision to hospitalize (Bassuk, et al., 1983; Vermeiren & Van Oost, 1999). There was a high

concentration of psychopathology among homeless people and conditions of homelessness or shelter life, including loss of stability, autonomy, and relatedness, which may exacerbate pre-existing mental illnesses (Goodman, et al., 1991).

It was thought that the distress experienced by patients with the combination of disordered thinking, (which includes delusions, hallucinations, or other difficulties in thought patterns caused by mental illness) and homelessness would be so severe as to increase the chances that these patients would be admitted to the hospital. The results suggest there might be a trend in that direction; however, the number of subjects with these combined problems is too small to note a significant relationship.

Perhaps one explanation is that homeless patients would be more appropriately treated with another level of care, in addition to being connected with a shelter. If the patient's illness is not severe enough to be causing harm to self or others, then it is more appropriate for the patient to be discharged regardless of the psychosocial stressor of homelessness. However, in order to provide quality of care that works in the best interest of the patient, it is extremely important that a procedure be put into place to connect them with the appropriate community resources. Perhaps an investigation looking specifically at the homeless mentally ill would be helpful in addressing the needs of that population.

Homelessness and Disposition. No significant difference was found between the proportion of patients with homelessness as their primary presenting problem, who were discharged into the community with a referral, than those without homelessness as their primary presenting problem, who were discharged.

It was hypothesized that if a patient came into the PES with the primary presenting

problem of homelessness, the patient would be discharged due to the inappropriateness of providing inpatient psychiatric services for a presenter because of lack of shelter. Homelessness, in and of itself, is a psychosocial stressor that should not be remedied with psychiatric inpatient care. Though the results show that this seems to be the trend, there were only eight patients out of 600 who reported homelessness as their presenting problem. It is possible that there may have been significance if there were a higher number of subjects actually reporting homelessness as the primary problem. One possible explanation for the low number is the tendency for patients to report a psychiatric complaint when presenting to the PES. According to Simon and Goetz, (1999), the homeless may state they are suicidal or homicidal in order to obtain secondary gains of inpatient admission, such as food or shelter. Homelessness is a severe psychosocial stressor that can cause an individual great distress. Again, it is extremely important to provide the homeless patient with the appropriate community resources. There is also the tendency of the crisis worker to report a psychiatric presenting problem. There is a wider-ranging systemic reason for this that should be considered, in that it might be difficult to retrieve payment for psychiatric treatment of any kind when there is no psychiatric complaint or diagnosis.

Social Support and Disposition. No significant difference was found between the proportion of patients with social supports, who were discharged, than those patients without social supports, who were discharged. It was hypothesized that patients with social supports in place would be more likely to be discharged into the community with the hope that the individual would use the available supports to improve treatment compliance and to get assistance in completing tasks necessary to function at a higher level of care. The results, however, suggest that the presence of social support have no influence on the decision to hospitalize. This is not in

support of Bassuk, et al. (1983), who claimed that lack of an available social support system had a greater influence on the patient than the degree of psychopathology. Schnyder et al. (1999) also felt that the strength of support system was a powerful predictor of hospitalization, and Marson, et al. (1988) stated there was decreased potential for inpatient hospitalization if the patient had social resources present.

Because the outcome indicates no significant difference in disposition of the patients that have social support, there are a few potential explanations. It can be viewed that the presenter is experiencing great distress despite the existence of social supports; therefore the supports are not enough to allow discharge. Also, the term "social support" is somewhat subjective. One crisis worker may interpret the presence of a family member as support, whereas another may be aware of the nonsupportive relationship between the patient and family members. Additionally, it is important to consider that the patients' perceptions of the presence of support may not be accurate due to the nature of their mental illness.

There is a need to operationally define "social support" to make it less difficult for the crisis worker to assess. The assessment form asks only whether or not support is present. Perhaps if the form specifically gathered information regarding the type of support (family, friends, case manager, etc.) and the level of support, the information might be more clear, and would be utilized more in the decision-making process.

Substance Abuse and Psychosocial Stressors. Patients with a substance abuse diagnosis had significantly more psychosocial stressors than patients who present without a substance abuse diagnosis. The impact of the substance-abusing population is substantial in the PES in that they are in great need of services, but have less need of psychiatric hospitalizations (Zealberg &

Brady, 1999). This study found that individuals with substance abuse and schizophrenia have more homelessness. There is a cyclical relationship between substance abuse and psychopathology in that the mentally ill have a higher prevalence rate, and those that use substances have a greater chance of developing comorbid psychopathology (Breslow, et al., 1996a). As many as 98% of individuals presenting for substance-abuse treatment have some depressive symptoms. While in the state of intoxication or withdrawal, judgment is impaired and impulsivity is increased (Milner, et al., 1999). It is understandable as to why these characteristics might lead to an increase in psychosocial stressors. The nature of the effects of the substances used often cause the individual to engage in behaviors that would decrease their support system. Also, many psychosocial stressors are a result of financial difficulties. Many substance-abusers have spent their money on the substances to which they are addicted. This inevitably leads to economic and housing difficulties. Many patients with substance-related disorders present to the PES with chronic problems as opposed to acute and should technically not be treated on an emergent basis.

Threat of Harm and Disposition. A significantly greater proportion of patients who presented to the PES with "threat of harm to self or others" were admitted to the hospital than those who presented to the PES without "threat of harm to self or others."

The most important determination to be made in the assessment of the PES is whether the patient is a threat of harm to self or others. Often the patient will report the presenting problem as suicidal ideation when it is not, and conversely, if a patient is truly suicidal, he or she may deny this even if the assessor feels it is true. It is essential for the PES worker to perform a suicide risk assessment looking at lethality based on evaluating intent, plan, and access.

Risk of deliberate self-harm is one of the strongest predictors of admittance into a hospital. Because of this, many patients who present to the PES report suicidal ideation as their primary or secondary presenting problem (26.5%) and the crisis worker records this as such regardless of the accuracy of the statement. Therefore, in order to establish a more accurate relationship between suicidality and disposition, this hypothesis was tested using only the more severely suicidal presenters who had made gestures or attempts. The results of this investigation support Schnyder and Valach (1997) who found that 56.9% of suicide attempters were hospitalized.

There are many patients who self-refer to the PES with the intention of getting hospitalized. Though the reasons for self-referred presentation range from true suicidality to no other place to go, many patients are aware of the rule that disposition decisions are based on threat of harm to self or others. These findings are in support of the Marson, et al. (1988) study, which saw suicidal or homicidal ideation as one of the key predictor variables of hospitalization.

Psychosocial Stressors and PES Site. Patients who present to the urban PES had more psychosocial stressors than patients who present to the suburban PES.

Strakowski, et al. (1995) inferred that the PES is used as more of a general support system, as opposed to a site to treat true psychiatric crises. This could be in part because of the patient's lack of connection to other community or ongoing psychiatric services. The underprivileged population of a low SES area tends to utilize more emergency services in general (both medical and psychiatric), as opposed to preventive or consistent treatments (Gerson & Bassuk, 1980). Vermeiren & Van Oost (1999) found that psychosocial crisis was one of the main characteristic features of individuals at higher risk for psychiatric emergency. This

would indicate a greater need for support services in the urban community. It would seem more beneficial to the patient's well-being and independence to get assistance in the community, and would be more cost-effective and efficient for the mental health services to be provided within the community rather than the PES.

Homelessness, Unemployment, Lack of Social Support and PES Site. Presenters at the urban PES reported more homelessness, more unemployment, and less social support than those at the suburban PES. These results support the findings of Friedman, et al. (1981) who conducted a study in an inner city hospital, which predominantly serves a low socioeconomic status. The objective of that study was to collect information on the patients' support system, as well as their social, work and community functioning. The findings suggest 69% of the patients were rated as having poor to extremely poor social adjustment, 41% were given ratings of extremely poor life-long family adjustment, 60% of patients did not finish high school, only 2.6% reported working "mostly full-time," and 5.3% were homeless. Dhossche & Ghani (1998) provided findings that unemployment and homelessness were more strongly correlated with multiple PES visits than a diagnosis of schizophrenia. This study focuses on the necessity of social, economic and familial interventions. Hatfield, et al. (2000) found that the most frequently rated factors contributing to crisis were psychosocial contributors. It seems likely that the presenters at the urban PES, which is a predominantly impoverished population, would be experiencing more severe and emergent psychosocial stressors, such as homelessness and unemployment.

Relationship Conflict, Occupational Stress and PES Site. No significant difference was found between the proportion of patients presenting to the suburban PES who report relationship conflict than those who present to the urban PES. This investigation found this to be the highest reported primary stressor in the realm of "problems with primary and social support" (21.3%). This result supports the studies of Schnyder, et al. (1999) and Hatfield, et al. (2000), who found that in the majority of cases, conflicts within close relationships were the most frequently reported psychosocial stressor precipitating the current crisis. There is no literature comparing the psychosocial stressors between urban and suburban sites. However, this investigator sought to find the differences that characterize the psychosocial stressors of each population. This investigation found that relationship conflicts are equally prevalent in both urban and suburban populations.

A significantly greater proportion of presenters at the suburban PES report occupational stress than the proportion of presenters at the urban site. This did not include unemployment as a problem. Kent and Yellowless, (1994) found that 13% of their admissions involved employment problems. One reason why this was significant could be because those who experience occupational stress are those who are employed, and the unemployment rate is higher in the urban site (50%), as opposed to the suburban site (34%).

A study conducted in a suburban environment in Switzerland (Schnyder, et al. 1999) reported presenting problems were often job-related, as this current study supports, or involved relationship conflict, which is the highest social support-related stressor regardless of urban or suburban environment.

General Implications of Findings

Theoretical Implications. This study shows support that there is a high correlation between psychosocial stressors and presentation to the PES. Though the problem of mental illness and psychosocial stressors is cyclical and one has the potential to exacerbate the other, the inpatient facility is equipped to deal primarily with psychiatric illness. Therefore, it would be inappropriate to admit a patient who is primarily experiencing psychosocial stressors. This fact, however, does not prevent the presentation of such individuals. It is up to the PES to develop a protocol to refer to alternative levels of psychological treatment and also to connect the patient who is going to be discharged with community organizations, which would be able to assist them when they are in the community. The goal of this would be to assist patients in fulfilling the needs that brought them into the PES in hopes that they can alleviate crises in the future and not require emergency services. According to Ruggeri and Tansella, (2002) these needs are described as requirements of individuals that allow them to achieve an acceptable level of independence and quality of life.

There is an underlying assumption that individuals who experience mental illness are going to have greater difficulty managing daily tasks, which will only lead to increased psychosocial stressors. Conversely, these psychosocial stressors add great distress to the individual experiencing psychiatric problems, who already has fragile coping mechanisms. According to Kent and Yellowless (1994), absence of social support can be conceived of as dysfunctional relationships, social isolation, or lack of professional or natural social supports. They emphasize the need for appropriate community resources and case management services in order to provide the patient with assistance in improving his or her relationship with agencies in

areas of everyday functioning. The goal of these supportive services is to avoid a presentation at the PES for psychosocial reasons.

As stated in Hatfield, et al. (2000), the PES is overwrought with emergencies that are psychosocial in origin in addition to psychiatric emergencies. Lidz, et al. (2000) conclude that situational factors and social control concerns are even more influential determinants of psychiatric hospitalization than diagnosis. Clearly the knowledge of how the patients' environment affects them and their presentation is beneficial to the patients' treatment. One essential aspect of this is not to generalize research to all PES sites, for as we saw, the urban and suburban presenters have significant differences despite the relatively small distance of 5.5 miles. It is important to be able to address the specific psychosocial stressors that the PES presenter is facing in order to place the patient with the appropriate level of care and possibly link them with the specific support services they require. Schnyder, et al. (1999) suggests a systemic approach to treatment which focuses on psychosocial stressors. The role of the PES in regard to psychosocial stressors is to prevent hospitalizations of those who can be treated in the community by reducing acute symptoms and stabilizing the patient to a level appropriate to be released back into the community with referrals to get connected or reconnected with a lower level of care (Segal, et al., 1995).

Research Implications. There is a paucity of research as to how psychosocial stressors affect one's mental health. This investigator was unable to locate one article addressing the psychosocial stressors as they are defined by Axis IV of the DSM. It is quite clear that psychosocial stressors often play a pivotal role in the functioning and well-being of the individual, and more research should be done in order to better understand the relationship and

how improvements can be made both systemically and with the individual.

Applied Implications. One example of applied implications is to explore the possibilities of implementing programs, which provide the population in need with assistance to cope with the psychosocial stressors that are causing them distress prior to the situation getting to the point where it becomes emergent. It is clear that psychosocial stressors are one of the most prevalent catalysts to the PES presenter coming in for assessment. This relationship between psychosocial stressors and mental illness is cyclical in that one may exacerbate the other. Despite the extreme importance of the effects of psychosocial stressors, neither the PES nor the psychiatric inpatient hospital is the best place to address these issues. They are community issues, which should be tended to externally. The hope in deinstitutionalization was that individuals with mental illness could live within the community. This requires that there are more community supports for the individual in order to keep him or her out of the hospital.

General Limitations of Study

This study utilized archival data and, thereby, the investigator had limited control of the data-collection. There was no way to retrieve information that was missing on the assessment tool or find out why it may have not been recorded. Nor was there any way to determine the reliability of the data that has been collected. In any study using clinical data there is the possibility of clinician variability due to different levels of experience and education. Some information may be incomplete or invalid due to the nature of PES centers and the fact that some

patients who presented may have been too disturbed to cooperate or to provide the clinician with accurate information. Also, while the assessment tool was designed by a committee of experienced and educated professionals, and abides by the American Psychological Association guidelines for PES assessments, it is not a standardized measure with established reliability and validity and may not be easily compared with other studies using reliable and validated measures. A study by Way, et al. (1998) found low agreement between raters who completed a PES assessment tool. The study indicated that a potential cause for the low agreement could be the different mental models with which the raters thought each concept should be measured, or that the raters disagreed on which objective pieces of information were important to form a judgment.

Additionally, the assessment form allows for subjectivity on the part of the clinician. This seems pronounced in the area of psychosocial stressors. Though this investigator attempted to standardize definitions of psychosocial stressors by using the guidelines of the DSM-IV, there is still significant room for subjectivity even within those parameters. For example, the first of the nine aspects that Axis IV is broken down into is entitled "Problems with primary support and problems related to the social environment." This is further broken down into 12 specifiers, one of which is labeled "inadequate social support." Even the operational definitions provided allow for subjectivity in reporting and interpretation.

Another limitation was that some of the hypotheses focusing on specific variables or combination of variables in subjects did not have a high enough number of participants to accurately test the hypothesis. For example, there were only eight patients who reported homelessness as their presenting problem. This low number was not anticipated during hypothesis development and does not allow a high enough power to obtain accurate results.

Future Directions

The PES has emerged as an essential component to the mental health care system in the immediate sense in that it serves to protect the individual and the community from the threat of harm. More comprehensively, it has become the gateway to the provision of other psychiatric and psychological services. Because the PES has become such a pivotal part of our mental health system, it warrants further research in attempts to improve the efficiency and effectiveness of operating. One way to function successfully is to be familiar with the population being treated. It is imperative that more studies be conducted to examine trends of the patients presenting. In order to decrease utilization of the PES as a way to remedy social crisis, systemic changes must be made in allowing provision of support for a population requiring assistance in managing their world in a psychosocial context. Agencies must encourage patients to be better connected to areas of employment, education and provision of social support. The findings reinforce the need for interventions to ameliorate this problem. Within the given social, financial, clinical and administrative parameters, it is our goal to meet the challenge of providing the highest quality care within the PES.

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Appendix

Variables collected

Variable	**Operational Definition**	**Method of collection**
Age	18y.o – 91y.o.	Demographic Section of PES assessment
Gender	Male Female	Demographic Section of PES assessment
Education	8th grade and below 9-12 grade High School Graduate Some College College Graduate	Demographic Section of PES assessment
Marital Status	Married Never Married Separated Divorced Widowed	Demographic Section of PES assessment
Employment	Part-time Full-time Student Retired Public Assistance Disability Unemployed	Demographic Section of PES assessment
Ethnic Background	Caucasian African American Asian Hispanic Other	Demographic Section of PES assessment
Primary Language	English Spanish Other	Demographic Section of PES assessment
Insurance Type	Private Medicaid / Medicare None	Demographic Section of PES assessment
Referral Source	Self Family / Friend Police Mental Health Agency School Other	Presenting Problem / Reason for Referral Section

Number of PES visits within one-year time period	Number represents number of visits	History of Mental Health Treatment
Crisis Site	Crisis site visited within the past year: Suburban Urban	History of Mental Health Treatment
Recent PES visit	Patient has additional PES visit within 30 days prior to most recent presentation: Yes No	History of Mental Health Treatment
History of Psychiatric Inpatient Hospitalization	Patient has been hospitalized in a psychiatric unit prior to PES presentation: Yes No	History of Mental Health Treatment
Recent Inpatient Psychiatric Hospitalization	Patient was hospitalized in and inpatient psychiatric unit 30 days prior to the date of presentation to PES: Yes No	History of Mental Health Treatment
History of Psychiatric Outpatient Care	Patient has received past psychiatric outpatient care anytime during their lifetime: Yes No	History of Mental Health Treatment
Case Management Services	Patient current involvement with Case management services: Yes No	History of Mental Health Services
Outpatient Therapy	Patient's current involvement in outpatient individual psychotherapy services: Yes No	History of Mental Health Services

Partial Care Program	Patient's current involvement in partial care services: Yes No	History of Mental Health Services
Medications	Current psychotropic medications that the patient has been prescribed to take from a physician: Yes No	Medications Section
Primary Presenting Problem	First problem listed as reason for PES visit: Suicidal Ideation Suicidal Gesture Suicide Attempt Homicidal Ideation Homicidal Gesture Homicide Attempt Delusions Hallucinations Disruptive Behavior Medical Complaint Depressed Mood Anxiety Anger Substance Abuse Substance Dependence Psychosocial Stressor(s) Cognitive Impairment Self Mutilating Behavior Bizarre Behavior Other	Presenting Problem / Reason for Referral Section
Secondary Presenting Problem	Second problem listed as reason for PES visit Suicidal Ideation Suicidal Gesture Suicide Attempt Homicidal Ideation Homicidal Gesture Homicide Attempt Delusions Hallucinations	Presenting Problem / Reason for Referral Section

	Disruptive Behavior Medical Complaint Depressed Mood Anxiety Anger Substance Abuse Substance Dependence Psychosocial Stressor(s) Cognitive Impairment Self-Mutilating Behavior Bizarre Behavior None	
Substance Intoxication	Alcohol Amphetamines Barbituates Benzodiazepines Cocaine Cannabinoids Opioid PCP > 1 substance > 2 substances No intoxication	Substance Abuse Section
History of Suicidal Behavior	History of any suicidal behaviors (gestures and/or attempts): Yes No	Risk Factors Section
History of Homicidal Behavior	History of any homicidal behaviors (gestures and/or attempts towards another person): Yes No	Risk Factors Section
History of Abuse – Victim	History of being physically, emotionally, or verbally abused: Yes No	Risk Factors Section
History of Abuse – Perpetrator	History of acting physically, emotionally, or verbally abusive towards another abusive:	Risk Factors Section

	Yes No	
Other Risk Factors	Fire Setting Animal Abuse Use of Weapons Domestic Abuse victim Domestic Abuse perpetrator No other risk factors	Risk Factors Section
Legal History	History of any legal charges, incarceration, and/or probation: Yes No	Legal Issues Section
Current Legal Involvement	Current legal charges, incarceration, probation, and/or parole: Yes No	Legal Issues Section
Positive Social Support	Yes No	„Environment/Home' „Relationship' Sections
DSM-IV-TR Axis I Diagnosis *Primary Diagnosis*	Diagnosis delineated as the primary clinical diagnosis: Childhood Dx Learning Disorders PPD ADHD Conduct Disorder ODD Disruptive Behavior Disorder NOS Mental Dx due to general medical condition Substance Related Disorders Polysubstance Related Disorders Alcohol Related Disorders Amphetamine Related Disorders Cannabis Related Disorders	DSM-IV-TR Primary Axis I Diagnosis under Summary of Mental Status Exam Section

	Cocaine Related Disorders Hallucinogen Related Disorders Inhalant Related Disorders Opioid Related Disorders Sedative Related Disorders Thought Disorders Schizophrenia Schizoaffective Delusional Disorder Psychotic Disorder NOS Mood Disorders Depressive Disorders Bipolar Disorders Anxiety Disorders Sexual Disorders Eating Disorders Adjustment Disorders Dementia Disorders Other Deferred No Axis I diagnosis	
DSM-IV-TR Axis I Diagnosis *Secondary Diagnosis*	Diagnosis delineated as a secondary clinical diagnosis: Childhood Dx Learning Disorders PPD ADHD Conduct Disorder ODD Disruptive Behavior Disorder NOS Mental Dx due to general medical condition Substance Related Disorders	DSM-IV-TR secondary Axis I diagnosis under Summary of Mental Status Exam Section

	Polysubstance Related Disorders Alcohol Related Disorders Amphetamine Related Disorders Cannabis Related Disorders Cocaine Related Disorders Hallucinogen Related Disorders Inhalant Related Disorders Opioid Related Disorders Sedative Related Disorders Thought Disorders Schizophrenia Schizoaffective Delusional Disorder Psychotic Disorder NOS Mood Disorders Depressive Disorders Bipolar Disorders Anxiety Disorders Sexual Disorders Eating Disorders Adjustment Disorders Dementia Disorders Deferred No Secondary Diagnosis	
DSM-IV-TR Axis II Diagnosis	Criteria is met for a DSM-IV-TR Diagnosis of one f the following Personality Disorders: (Axis II diagnosis of Mental Retardation Disorders has been excluded from the study): Paranoid PD Schizoid PD Schizotypal PD Antisocial PD	DSM-IV-TR Axis II Diagnosis under Summary of Mental Status Examination

	Borderline PD Histrionic PD Narcissistic PD Avoidant PD Dependent PD Obsessive-Compulsive PD Personality Disorder NOS No Axis II diagnosis or deferred	
DSM-IV-TR Axis III : Medical Diagnosis Primary & Secondary	Based on Literature Review and Clinical Experience the following Axis III medical diagnosis that are frequently comrbid with PES presenters : Diabetes Hepatitis Asthma Thyroid HIV Hypertension Obesity Seizure D/O Other None / Deferred	DSM-IV-TR Axis II Diagnosis under Summary of Mental Status Examination
DSM-IV-TR Axis IV	Psychosocial Stressors as delineated in the DSM-IV-TR diagnostic Criteria (APA, 2000): Problems with primary support and Problems related to the social environment: Death of family member Health problems in the family Disruption of Family (Separation, divorce, estrangement) Conflict in relationship with significant other Removal from the home Discord with siblings Physical or sexual abuse Death or loss of a friend	DSM-IV-TR Axis IV Diagnosis under Summary of Mental Status Examination Obtained from the section „Presenting problem', listed under Axis IV, and/or as follows: „Environment/Home' as well as from the „Relationships' and „Abuse/domestic violence' sections

	Inadequate social support (Lack of friends & relatives on whom they can rely) Living alone Difficulty with Acculturation Other conflictual relationships None	
	Educational Problems Unable to read Unable to write Did not complete high school Academic problems Discord with teachers or classmates None	„Education' section
	Occupational Problems Unemployment Job Dissatisfaction Discord with boss or coworkers None	„Employment' section
	Housing Problems Homelessness Unsafe neighborhood Discord with neighbors or Landlord None	„Environment/Home' section
	Economic Problems No Income Inadequate Income None	„Activities of Daily Living' section
	Problems with access to health care services Inadequate health care services Inadequate Insurance None	„Activities of Daily Living' section „Activities of Daily Living' section

	Problems related to interaction with the legal system Arrest/Charge Incarceration Litigation Victim of a crime Probation/Parole None Other psychosocial and environmental problems Exposure to disasters or war Discord with non-family caregivers (counselor, social worker) Deferred / Denies	„Legal Issues' section Presenting Problem
DSM-IV-TR: Axis V – Global Assessment of Functioning	GAF score	DSM-IV-TR Axis V Diagnosis under Summary of Mental Status Examination
Disposition	Referral Patient is given upon being discharged from PES: Community Voluntary Hospitalization Involuntary Hospitalization Jail Detox Medical Admission	Disposition of Client Section

*excluded from this study are individuals meeting criteria for mental retardation and PDD, as well as individuals residing outside of the catchment area and psychiatric emergency screenings on medical units, and outreach psychiatric emergency requests. Patients under age 16 and over age 65 are also excluded from this study.